

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL
RAILROAD AND FINANCIAL NEWSPAPER.

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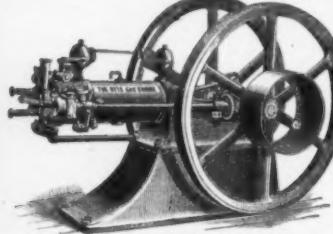
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A Southern Industrial, Railroad and Financial Newspaper.

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WEEKLY.

BALTIMORE, DECEMBER 27, 1890.

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BALTIMORE, DECEMBER 27, 1890.

HON. EDWARD ATKINSON's paper on "The Future Situs of the Principal Iron Production of the World" has been published in pamphlet form. The MANUFACTURERS' RECORD will fill orders upon receipt of 25 cents per copy.

AFTER commenting on the MANUFACTURERS' RECORD reports of Southern development the New York Commercial Bulletin truly says:

To the farming interest the South offers great advantages. The leading cereals, oilseed and root crops are grown there, and there is a vast production of crops familiar but grown earlier there. The mild climate shortens the season of cold and gives great advantage in the rearing of animals, while it materially influences the economics of living. Altogether, the prospect of growth and prosperity at the South is most encouraging, particularly if the pressure of partisan legislation is not laid upon it. The threat of such a pressure steadily checks investment and enterprise, particularly the enterprise associated with the incoming of Northern capital, which shows a disposition not to go into States where the masses of the people believe that they are discriminated against by severe laws, and not left under a system which has descended to them from the foundation of the Republic.

FOLLOWING is a form of advertisement which will be inserted four times free of charge in our "Southern Investments" column:

We have on hand the following Roanoke loans for sale. Write us for full particulars—
6 per cent., valuation \$75,000, rental \$10,000 per annum. Loan payable \$2,000 1 year, \$2,000 2 years, and \$2,000 3 years.
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JOHN SMITH INVESTMENT CO.

Englishmen's Interest in the South.

Evidences multiply that the British members of the Iron and Steel Institute who visited the South last fall carried home a strong conviction that in time that section would become the world's greatest center of the iron and steel industry. Most of the trade journals of Great Britain have published interviews with the principal visitors, all of which testified to the inexhaustible abundance of the ores, the cheapness with which they could be mined and smelted, and to their generally excellent quality. Supplementing these favorable reports are others from prominent Englishmen, not members of the Institute, who have made personal investigations of the South's mineral wealth.

The Detroit Evening News of recent date published an interview with Mr. John P. Grant, a Canadian gentleman who has organized many large corporations in England to engage in American industries. Mr. Grant is reported as saying:

"There seems to be an English craze for Southern investments. I never saw anything equal to it in my life. There are millions of dollars in London not affected by the financial flurry of speculators that will be invested in the South."

"Why do you work in the interest of Southern investments when you have both the coal and the iron in Canada?" was asked Mr. Grant.

"Because, in the first place, the Englishman is unwilling to invest his capital in iron making in my country. England will not encourage it. She wants to make it herself. Another reason is the South has the coal and ore together, while they are from 600 to 800 miles apart in Canada. Another reason is there is a market for it in the South, and there is none for it in Canada. I have just returned from London, where a syndicate has been formed to develop 70,000 to 80,000 acres of Tennessee coal, iron and timber lands, and they have closed a contract with James P. Witherow, of Pittsburgh, Pa., to erect a 150-ton furnace and 1,000 coke ovens, and I was reliably informed that the same company had like contracts for \$4,000,000 to \$5,000,000 of iron furnaces and coke ovens in the South. Since the iron and steel men have made their report and told of the marvelous deposits of iron and coal in the South

there is a craze in that country for investment in the region embracing them, and it will be a very easy matter to secure English capital, either wholly or in part of any solid enterprise in which the owners can show that they have coal or iron, and I would advise those having such property to open the veins so they can see it when they come and bring their engineers."

The above confirms the opinions frequently advanced by the MANUFACTURERS' RECORD, that British capital would seek investments in the coal and iron districts of the South, and that the time was close at hand when every property of real merit that had been developed sufficiently to show what it was would be sought for by foreign capitalists who wished to engage in the iron and steel industry in the South.

The demand for iron ore from the furnaces now in process of erection will be so great that all who have ores of good quality contiguous to transportation will find it to their profit to uncover them at once and get a stock on the dumps for shipment. By the time they have done this the demand will begin, and meanwhile their properties will be exposed sufficiently to enable would-be investors to form an opinion of their value.

AN important decision recently rendered in the United States Circuit Court, sitting in Boston, illustrates the value of patents and the protection American patent laws now extend to their legitimate owners. There is in New York a concern called the Hat-Sweat Manufacturing Co. This company controls patents in all kinds of sweat-bands used in hats, and has issued licenses for their use to 165 hat manufacturers. J. P. Gilman Sons, of Haverhill, Mass., refused to pay royalties to the company, claiming that false representations were made to them when the license was issued. Judge Colt, in his decree, ruled that no false representations were made and that the defendants must pay the royalties in full with interest and costs. The total of royalties for a year from the 165 manufacturers is \$500,000, and as the patents have six years to run the amount involved was \$3,000,000. The defendants acknowledged judgment and paid the entire sum required.

Basic Steel Patents Again.

The Steel Patents Co., which is simply a new name for the old Bessemer Steel Co., Limited, met in Philadelphia two weeks ago and decided to grant to all persons who may desire to manufacture basic steel the right to use the company's patents for this process upon payment of a royalty of \$1 per ton of pig iron converted. Ostensibly this removes the restrictions by which the basic process in this country has been so completely suppressed for ten years past; but practically the conditions are not changed by this move of the Steel Patents Co., and the basic process remains just about as much suppressed as ever. This latest move by the little ring of gentlemen who once held the Bessemer process tightly in their grasp, and who now as completely control the basic process, indicates that they are at present no more seriously inclined to permit the use of the basic process than they have been at any time during the last ten years. A tax of \$1 per ton upon the metal converted is a preposterous demand, considering the fact that the basic is not a cheap process, and there is little danger that the Steel Patents Co., will be much troubled by applicants for the privilege of paying this tax. Of course this is what the owners of the patents anticipated, and it is what they desire.

The present position of the owners of the basic patents is strictly in keeping with the line of policy which they have so long followed. At no time since the first purchase of the Thomas patents in 1881 has there been manifest any serious disposition to allow the use of the basic process by any steel manufacturers outside of the chosen few in the Bessemer Steel Co., Limited. The owners of the patents have ever been profuse in their declarations of willingness to allow any and all manufacturers to use the basic process, but all these protestations were nullified by an utter absence of performance, not a single license having been granted in the whole ten years. We presume that the recent decision

to permit the use of the basic process upon payment of a royalty of \$1 per ton of materials used is the first result of the "reorganization" of the Bessemer Steel Co., Limited, which was pleaded as an excuse for the obstructive policy of that close corporation a year ago, but we fail to see wherein good has come from this reorganization and change of name. Terms as favorable as those now demanded were offered ten years ago, and were then, as now, regarded as preposterous.

The value of the basic process lies in its ability to utilize high phosphorus irons which cannot be converted into good steel upon an acid lining in an open-hearth furnace or Bessemer converter. By means of a basic lining a very pure steel can be made from iron that is otherwise worthless for steel making, but the basic process possesses no economy over acid methods. In fact, the cost of conversion is less by present practices than by the basic process. Even with the advantage of being able to use cheaper grades of pig iron, basic steel makers could not stand a tax of \$1 or more per ton of ingots, nor is there any reason for which such an extortion should be practiced upon them. The owners of the patents seek to justify their position by declaring that the patents originally cost them \$275,000, to which the expenses of litigation have added upwards of \$100,000, and as the patents have not much longer to run, they desire to reimburse themselves before their rights become void. This excuse is as absurd as it is audacious. Had the owners of the basic process permitted its use upon reasonable terms, they would have been repaid the cost of their patents many times over long before now. There has been ample opportunity in ten years for them to regain what they paid out, and when these gentlemen of the Steel Patents Co. raise such a plea at this late day, they only present themselves as fitting objects of ridicule and scorn.

Were they to give the patents to the world free of cost they would lose nothing, for the suppression of the basic process during ten years of phenomenal activity has relieved these few powerful firms of an amount of competition that would have reduced their profits by hundreds of thousands of dollars if left unrestrained. No, the owners of the basic patents have lost nothing by their investment of a few hundred thousand dollars, and they ought to be content with what they have made thus far. This is evidently the view of some of the more scrupulous members of the Steel Patents Co., for we understand that the issuing of licenses has been the subject of much contention within the company. Some of its members desired to have the royalty fixed so high as to preclude all possibility of the acceptance of the terms imposed, while others were

willing that the process should be used upon nominal royalties. We do not believe that the decision reached accomplishes either end, although it is our opinion that the Steel Patents Co. will have to content itself with empty coffers for some time to come if it shall depend upon royalties at \$1 per ton for income.

To the South this latest move may mean much or it may mean nothing. There are several substitutes for the basic furnace linings covered by the patents owned by the Steel Patents Co. which appear to meet fully all the requirements of the basic process. Moreover, there seems to be a disposition on the part of prospective steel makers in the South to disregard the Steel Patents Co. in their calculations, and it seems certain that the Steel Patents Co. and the rights that it owns are growing less and less important as factors in framing the future of the Southern iron and steel industry.

A DISCOVERY of great value to many sections of the South has been made by Prof. Wiley, chief of the chemical bureau of the Department of Agriculture. In announcing it Secretary Rusk states that it practically settles the long doubtful question whether or not sugar could be profitably made from sorghum cane. Prof. Wiley's report is quite interesting. He refers to the difficulties that have attended all previous efforts to produce sugar from sorghum, which have been occasioned by the gummy matter that could not be separated from the juice without precipitating the sugar. Prof. Wiley is confident that a process has been found to overcome this difficulty at an immaterial cost as compared with the results obtained. From the refuse sufficient alcohol can be made to cover the costs of the process. If the process that has been proved a success in the laboratory can be conducted on a large scale with equal economical results, then large areas of suitable land in the Northwest and the South will be devoted to sorghum culture. This country buys, chiefly from Cuba and the Sandwich Islands, sugar to the value of \$100,000,000 annually, an enormous outgo for a single article of consumption. Should Prof. Wiley's discovery result in profitable sorghum sugar production in large quantities, the United States would soon be able to manufacture all it required for home consumption—a result greatly to be desired. In North and South Carolina, in many parts of Georgia and Alabama, sorghum was cultivated and syrup made from it during the war, and in various favorable localities it is still one of the annual crops, but when it shall be demonstrated by work on a large scale that Prof. Wiley's process can be profitably employed, this will speedily become one of the South's great industries.

"MONEY WANTED" advertised free of charge by the MANUFACTURERS' RECORD.

The South Baltimore's Source of Prosperity.

For narrow-minded provincialism there are some business men in Baltimore who could justly claim the first place over any competitors in America. It is this spirit that has retarded the growth of this city in the past, but there are some signs that men of broader views are going to take the lead in the future. Baltimore's future depends mainly upon the South. It is useless for her to expect to control much Western trade except in a few specialties like oysters and canned goods. Her grain trade must of necessity continue to decrease, for we are fast reaching that point where the United States will practically cease to be an exporter of wheat, and for her business she must depend upon the South. That section is destined to be the richest part of America, and even a moderate share of its trade will be enough to enrich Baltimore beyond the dreams of her most enthusiastic citizens. Baltimore should be to the South, especially to the great mineral region that stretches from Shenandoah Junction to Alabama, what Philadelphia is to Pennsylvania—the financial and general business center. With the proper degree of energy and broad-minded business principles, Baltimore could hold a controlling influence in the vast developments that are turning that favored section into a center of industrial activity. Baltimore capital, if invested as liberally there as it ought to be, would return millions of dollars of profits to enrich this city. It would make Baltimore the financial and business headquarters for the trade of that region. But there are a few Baltimoreans who imagine that this city can build a Chinese wall around itself and prosper because no money could then get out of town. Men whose every dollar has been made out of Southern trade attempt to decry Southern progress, because, forsooth, they cannot see that the growth of the South must inure to the advantage of this city. They have so long been accustomed to seeing the South year after year paying them for merchandise—the money all coming this way—that they are shocked when they see a few dollars go Southward for investment. A few days ago, at a meeting to advance Baltimore's manufactures, Mr. J. Frank Supplee said:

The drain of capital from our city to the boom towns and paper cities of the South is being seriously felt. An observant and experienced correspondent sent there to investigate reports that 60 per cent. of the foreign capital that has been invested in the territory of Southwest Virginia, extending from Roanoke to Bristol, came from Baltimore. New York, with her customary shrewdness, is conspicuous by her absence, while Philadelphia, Baltimore and the West are furnishing the lambs who are to be shorn of their golden fleece to make comfortable the land speculators of Virginia this winter. A report this week shows \$1,000,000 for the month ending November was invested by outsiders in this territory. All these booms are based upon the one

advertised foundation—the location of new manufacturing establishments in their midst, bringing population and distributing wages.

The foundation of all these movements is free land to manufacturers and an augmentation of from 20 to 33½ per cent. of their capital by the local improvement company. Within the past ten days six reputable establishments, employing an average of fifty persons each, have signed contracts to remove their plant from our city. The time of action has arrived. We may "resolute until the cows come home" about our "geographical position, terminal facilities and salubrious climate," but the exodus will continue until a more intelligent appreciation of manufacturing is developed and our citizens awake to an investment of their means here rather than in wild-cat ventures in town lots and mining speculations.

It is difficult to understand how any sane man could give utterance to statements that are so entirely without foundation. Baltimore has invested less money in Southern development enterprises than Richmond, Norfolk or Lynchburg. For every dollar that Baltimore has put into such enterprises Northern cities have invested a hundred. Instead of Baltimore's investments proving unprofitable, they have yielded better returns than any other investments that the people of this city have ever made. The croaking provincialism that is forever decrying every other place has made Baltimore the most unprofitable city in America for real estate investments, which ought to be the basis of all prosperity.

Less than a month ago, when the bank presidents of Baltimore met to discuss financial matters, and to consider the advisability of issuing clearing-house certificates, as New York and Boston had just done, they decided that such a step was not necessary. What was the reason? Because, said these gentlemen, the South has sent so much money here this fall that the Baltimore banks are well supplied with cash and do not need clearing-house certificates. Certainly these gentlemen ought to know as much about the matter as Mr. J. Frank Supplee. The MANUFACTURERS' RECORD is not in favor of boycotts, but if ever a boycott was justifiable, it would be in individual cases when business men whose money is made on Southern trade denounce the growth of that section as Mr. Supplee has done. The effect of such talk will be not to hurt the South, but to hurt Baltimore. On this subject the Roanoke Times, after interviewing the leading business men of the town, says:

The general concensus of opinion appears to be that Mr. Supplee speaks in this matter for himself, and not for the capitalists of Baltimore, but if any concerted action is taken by that city against this section, the people here will resent it by withdrawing the tens of thousands of dollars which are monthly being sent to Baltimore for supplies, as they will regard such action as a menace to their interests, and in that event Baltimore's business interests will be damaged more than will this section.

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Price \$4.00 a year, or six months for \$2.00

Plain Facts vs. Star-Chamber Proceedings and "Whitewash"

The Immigration Convention at Asheville sent out in the report of its proceedings the following:

The committee appointed for that purpose reported that they had investigated the charges made by the MANUFACTURERS' RECORD against Secretary John T. Patrick, and had found them unfounded.

Who composed this committee, or what they investigated, the MANUFACTURERS' RECORD does not know. In fact we doubt whether anyone else except Mr. F. B. Chilton and Mr. John T. Patrick, or a few of their personal followers, know. Judging by the report of the convention in the Louisville Courier-Journal, which we republish, it looks as though no one but Messrs. Chilton and Patrick was allowed to know anything. So far as "the charges made by the MANUFACTURERS' RECORD against Mr. Patrick" are concerned, we may say:

In October, 1889, when Mr. Patrick, as an officer of the Southern Immigration Bureau, was sending an agent to all the towns in his district, offering to furnish them—

with copies of all the letters from parties all over the world seeking information about the South with a view to emigrating, for \$140 down and \$8 every quarter—

the MANUFACTURERS' RECORD said: "And so the great Interstate Immigration Association, organized at Montgomery last year by leading men of the South, has gone to peddling out its correspondence. By the way, will some one tell us who composes this association at present? Have the leaders dropped out, or are they still working in it? and who is to run it; to receive the money, and to be accountable for the spending of it? The MANUFACTURERS' RECORD would be glad to have some light on these subjects."

Was this one of the "charges" that the committee decided to be unfounded? The records of boards of trades in North Carolina will show that this offer to peddle correspondence was made.

2d. About the time that the foregoing was published Mr. Logan H. Roots, president of the First National Bank of Little Rock, became so ashamed of his name used as a director of such an enterprise that he wrote to the MANUFACTURERS' RECORD that he had withdrawn from it and had no connection whatever with that association, and he also wrote to the association resigning as director. And yet when the invitations to the Asheville convention were issued, Mr. Roots' name, much to his disgust, appeared as director, thus helping to bolster up the concern.

Was this one of the "charges" which the committee decided to be unfounded? Mr. Roots' letter-books will show for themselves, but, of course, neither Mr. Roots nor his letter-books were wanted by that committee.

3d. On June 14 of last year the

MANUFACTURERS' RECORD editorially said:

AN UNAUTHORIZED CLAIM OF ENDORSEMENT.

A few weeks ago the MANUFACTURERS' RECORD published an editorial suggesting that collections of the minerals of the South be exhibited at the International Exhibition of Mining and Metallurgy, to be held in London at the Crystal Palace during the summer of the present year. A circular has recently been issued by the "Southern Interstates Immigration Bureau, department of organization, John T. Patrick, commissioner," offering, for a consideration, to take charge of individual exhibits for that exposition. Accompanying the circular is sent a reprint of the above-mentioned editorial from the MANUFACTURERS' RECORD, and it is stated in the circular: * * "the enclosed editorial of the MANUFACTURERS' RECORD, which you will observe is in every respect a full endorsement of our purpose."

The MANUFACTURERS' RECORD emphatically declines to be understood as endorsing or commanding the "Southern Interstates Immigration Bureau," either in this proposed plan or any other.

When this so-called "bureau" shows some reason for its existence, and has given evidence of good management, with some promise of accomplishing something in advancement of the welfare of the South, or any part of it, we will be ready to commend it, but we wish it understood that under present conditions we have nothing to say for it, and this unauthorized attempt to commit the paper to an endorsement of its schemes is a misstatement of fact and an unwarranted perversion of the intent and purpose of the editorial quoted.

Was this one of the "charges" reported on by the committee?

The MANUFACTURERS' RECORD would heartily favor any good work to attract immigration to the South, and for this very reason it is opposed to the methods used by this so-called Immigration Association, which has never done anything except to make itself the laughing-stock of all sensible men, and we very much fear that those who, knowing nothing of its past record, attended the Asheville meeting, will never be able to give character or standing to it.

In view of the fact that the South must soon prepare to spend a great many thousands of dollars to make an exhibit at Chicago, this was an exceedingly timely period at which to call the Asheville meeting, provided that meeting could be worked in such a way as to give one or two men sufficient prominence to help them capture the management of the entire Southern exhibit at Chicago. What a splendid advertisement for future land operations the management of the South's exhibits at the World's Fair would give, provided the Southern States could be induced to unite and make one great display at Chicago under the management of one or two men. On this subject the Asheville correspondent of the Boston Advertiser says:

The World's Fair in 1893 is to be well represented by the South, and provision was made for such by the appointment of F. B. Chilton, of North Carolina, who will make all necessary arrangements for a complete Southern exhibition. Other matters of more or less importance were discussed.

THE ASHEVILLE CONVENTION.

A Special Correspondent of the Courier-Journal Tells How It Was Manipulated by Chilton and Patrick.

The MANUFACTURERS' RECORD has never said a word about the management of the Southern Immigration Bureau that was not prompted by an honest and earnest desire to help the cause of Southern immigration. We have no personal animosity toward anybody connected with the management. We have not now, and never have had, any favors to ask. It was an unpleasant but none the less imperative duty to point out the unmistakable evidences of bad management that had been brought to our attention. Southern immigration is a great cause, worthy of the best efforts of our best men. At some time in the future the movement will pass into the hands of such men, and the MANUFACTURERS' RECORD will cooperate with them in the work with the same fidelity and earnestness that it has shown in all its labors for the advancement of Southern interests. We have given very candidly our reasons for not supporting the Chilton-Patrick regime, and the plain facts in the case cannot be wiped out by a coat of whitewash.

The Courier Journal shows up the inside workings of the Asheville convention in the following dispatch from its special correspondent:

The Southern Interstate Immigration Convention has adjourned, and it can not be said that all things connected with it have been as satisfactory as they might have been. It is true that it was an able and representative gathering, embracing many prominent men of the South, and there was an evident effort to do something of a beneficial character. It is also true that the result of the convention will be to advertise the resources and advantages of the Southern country, but this is due more to the advertisement given the movement by the newspapers than to what may follow from the thousand and one resolutions offered. But not a few delegates are asking what the Southern Interstate Immigration Association is; how and why it is conducted with such secrecy as to its bureau by Messrs. F. B. Chilton and John T. Patrick. The executive committee of last year was never called together, nor even recognized in any way by the bureau, but Mr. Chilton has promised that the new executive committee, and it is a very able body, shall meet next year. If it does meet it is certain that the association will be placed upon a permanent basis and its workings be open to the inspection of the public. The association as it now stands has no constitution nor by-laws, and consequently there is no apparent authority for the existence of the bureau or for the control of the officers. Mr. Chilton constitutes himself chairman of the executive board, but he has no authority for the presumption. He presided at the organization of the new executive board last night, much to the surprise of the members, who allowed him to go ahead probably out of a desire to see how far he would go.

The general manager came to the convention as a potentate, and constituted himself a demi-god throughout. He interfered whenever a resolution was presented that had a tendency to encroach upon his position as "boss," when in fact he was not even a delegate to the convention, and was on the floor purely through courtesy. While there was no effort made in the convention to have a statement of the affairs of the bureau, several members who endeavored to glean some information from Chilton in a personal way found that gentleman as close as a clam and very shy of the subject.

Mr. Chilton's report as general manager was the thinnest document ever offered any body. It was non-committal on the affairs of the bureau, and was really nothing but a fulsome eulogy of Mr. Patrick and a general blow for the author.

The convention did not get to vote upon the question of where the next meeting would be held, and this was due to the opposition manifested by Mr. Chilton, who adroitly persuaded enough members, added to his henchmen, to have the matter referred to the executive committee. This act was like the one last year, and it is a fact that Mr. Chilton never consulted the committee, and called the convention here at Asheville in a most arbitrary and unauthorized manner. There is strong talk of calling another convention and organizing an association with officers in whom there is confidence, and who are not connected with any big land schemes.

No one has charged Messrs. Chilton or Patrick with anything dishonorable, but the fact remains that there is too much secrecy in conducting affairs, and there appears to be "a nigger somewhere in the wood-pile."

Hon. M. T. Bryan, of the Tennessee legislature, who has presided so splendidly over the convention, came to the gathering just as many other delegates, without a clear idea of the processes of the association, and it would be unfair to identify him in any way with the present bureau. When asked about matters to-night Mr. Bryan said: "The convention would have been far more satisfactory if we had had a constitution and by-laws declaratory of the objects and purposes of the organization, and defining the duties of the respective officers. I think, however, the action of the convention will result in much good to the South. There is a manifest purpose to keep out improper immigration, and a strong desire to encourage a class of immigration that would help to build up and develop our great resources. An able executive committee has been appointed, which, if it takes charge of the work in hand, will prove fruitful of good results."

THE foreign demand for American iron and steel bridges has been slowly but steadily increasing for a number of years. It is the natural growth of a trade that began with the purchase of American locomotives, safety brakes, switches and other railroad appliances. The latest notification of the erection of an American bridge abroad came from Peru in a dispatch to Wm. R. Grace & Co., of New York, which stated that the Verrugue bridge was finished and opened to traffic. This is of the cantilever type and of a total length of 575 feet, its suspended span being 105 feet long. At the center of suspension it is 252 feet above the valley it spans. It is supported on two massive iron towers. It is made entirely of wrought iron and was constructed at the works of Cooper, Hewitt & Co., in Trenton, N. J. The chasm it spans is 235 feet wide, with precipitous sides. As large manufacturing plants increase their facilities for building heavy and costly works like that described, foreign orders will multiply, and thus the demand for our

iron products will be measurably increased. Grace & Co., who are building the Central Railway of Peru, have branch houses and extensive business connections in Great Britain. They are thoroughly well informed as to the comparative value and cost of such constructions as this bridge in both countries, and their giving of the contract to Cooper, Hewitt & Co. instead of to an English house was a practical acknowledgement that they could better themselves by so doing. Others engaged in large construction works in foreign countries will see and be governed by this action of Wm. R. Grace & Co.

THE Georgia Rolling Stock Co., a corporation now organizing in Macon, Ga., has a policy that other new companies would do well to adopt. This company has an authorized capital of \$1,000,000, and will engage in the manufacture and repair of railway cars. In order that the mechanics and workingmen of Macon may have a direct interest in this enterprise, it has been decided to issue to them, and to them only, first preferred guaranteed 7 per cent. stock to the amount of \$100,000. Subscriptions for this are payable, 10 per cent. when organized, 10 per cent. 60 days later and 10 per cent. a month thereafter until the entire amount has been paid. Under this plan a man buying stock of the par value of \$100 would have 13 months in which to make his payments. It has been the experience of all those places in which building and loan associations have been well conducted that habits of economy and thrift were formed among the stockholders that inured both to their individual benefit and to the welfare of the community. Great manufacturing establishments that, like the Brewster Carriage Co. in New York, have permitted their workmen to become sharers in their profits have found themselves gainers in all respects. In these days of labor unions and strikes such concerns are absolutely safe from trouble, because their workmen are as much interested as are the larger stockholders in having the business flourish. The same is true of all concerns in which mechanics and salaried employees in all kinds of business are stockholders. The plan of the Georgia Rolling Stock Co. is eminently wise and safe

COKE is king among fuels. The coals from which it can be made are in sufficient quantity to supply the world's need for centuries. The natural gas company at Pittsburgh gave notice some weeks since that the use of their gas must be restricted to private houses. Since then reports come from Ohio that there is danger that the supply for Columbus, Toledo and other cities will soon be cut off altogether. It is claimed that the waste has been so wanton as to greatly reduce the supply, and that it may be necessary to guard against future prodigality in its use by obtaining strong legislation in Pennsylvania and Ohio.

The Soo and the Mississippi.

The Sault Ste Marie canal, popularly known as the Soo, was closed for the season of 1890, having been open to navigation 228 days. The business done during that time is shown in the following table, obtained from official sources by the Sault Ste Marie News:

CANAL BUSINESS FOR 1890.			
Total miles, tons	5,940,666	352	
Total cost of transportation.....	38,634,246	ton	
Average distance freight was carried	790	4.10 m	
Total registered craft using canal during season.....	576		
Total register tonnage of same.....	393,017		
Average registered tonnage of same.....	700		
Total estimated value of same.....	\$26,926,200		
Average value of same.....	\$46,747		

On the 9th of June, 1881, the United States assumed control of this canal, and commenced the series of improvements that will soon be completed. The following table shows how business has increased as improvements progressed:

Season.	Actual freight, (tons of 2,000 lbs.)	Valuation of Average	
		East- bound.	West- bound.
1881.....	965,436	445,111	\$28,965,612
1882.....	1,38,027	691,494	31,238,153
1883.....	1,277,283	689,824	39,730,663
1884.....	1,099,290	695,467	51,995,786
1885.....	2,135,066	1,121,564	53,413,472
1886.....	3,179,943	1,347,816	59,650,071
1887.....	3,749,446	1,745,264	79,031,757
1888.....	3,923,344	2,088,070	82,156,019
1889.....	5,552,641	1,963,381	83,732,527
	6,428,838	2,612,375	102,214,748

The number of vessels of all kinds engaged in the traffic this year was 10,557, as against 9,579 in 1889, an increase of 10 per cent. The increase in freight tonnage over the previous year was 1,525,191 net tons, a gain of 20 per cent. The iron ore floated was 4,774,768 tons, an increase of 17 per cent. The vessels employed were 7,268 steamers, 2,872 sail vessels, 417 unregistered craft. The net tonnage through the canal this year amounted to 91,041,213 tons, an increase of more than 7,000,000 tons over 1889, which was justly considered a phenomenal season. All the ship-building plants along the chain of lakes have been employed in the construction of craft for this immense traffic, 978 vessels having been added during the year to the active fleet, all of which have been constantly employed. Many more are in the yards in various stages of construction that will be ready for next season's business.

The foregoing is a magnificent showing for eight months of waterway traffic. These figures approximately indicate the tremendous business that will be done on the Mississippi when the government improvements on that river and its tributary streams shall be completed.

The freights of the Soo traffic consists mainly of a few staples, such as ore, coal, grain, flour, lumber and salt, the unclassified or miscellaneous list amounting to 371,294 tons. As against this, set the interstate commerce of 28 Commonwealths in manufactured goods. Add to these the vast tonnage of ores, coal, pig iron, marble, building stone and lumber, and of wheat, corn, cotton, tobacco, wool and other staples of agriculture that enter into domestic consumption. Beyond these will be other shipments of great bulk and tonnage to load ships for foreign ports. The canal at the best can have but about

eight months for traffic. The Mississippi, from Cairo to its mouth, will, when all the contemplated improvements are made, be navigable all the year.

With these facts before Congress it would seem to be clear that true economy and wise statesmanship alike demand that appropriations should at once be made sufficient to cover the entire cost of the work, so that it may not hereafter be delayed as it has been in the past, because there were no funds provided for its continuance.

Restrictions on Immigration.

Surgeon-General Hammond has, in his report to the Secretary of the Treasury, given facts respecting the immigration of Europeans to this country that may well cause our statesmen and all who exert any influence upon public thought to study carefully our present system as preliminary to its complete remodeling. The number of foreigners who came here during the last six years intending to remain was 2,666,276. These people were of many nationalities, and very few, comparatively, had any knowledge whatever of our institutions and laws. They came because it is known through the world that this is freedom's land, but to many of these people freedom means unrestricted liberty to do as they please, regardless of the rights or the convenience of others; the right to tear down and destroy, to have no rule but misrule, no law but that every man should be a law unto himself. That in six years our population should be increased 4 per cent. by an immigration comprising many Anarchists and Socialists is a very serious matter. Many of these adult immigrants never acquire the English language and never fall into America's domestic ways.

They are alien elements of population that are easily influenced by unscrupulous schemers, and frequently, because they are without any conception of wrong and right, and of the value and sacredness of human life, they endanger the peace and good order of communities, and have to be suppressed by the strong hand of the law.

Another evil is that there is no systematical medical examination at any of the ports of embarkation, and consequently there are brought to our shores insane and idiotic immigrants as well as those carrying in their garments or in their persons the possible seeds of diseases that originate in the putrid dens found in many European cities.

"So far as my observation extends," says Dr. Hammond, "and so far as I can learn from the literature on this subject, there is no country in the world in which citizenship is so cheaply obtained as in the United States. The general question of restrictive measures as against the incoming mass is one of the most important that can be considered, whether viewed from an economical or political standpoint, and viewed from an American standpoint, there is no doubt that the welfare of the country de-

mands more restrictive measures than the present laws seem to be able to furnish. Thus of the fifteen insane persons and eleven idiots that were reported by the medical officer in New York, four of the insane and all of the idiots were permitted to land."

A system of surveillance is recommended by Dr. Hammond in the form following:

It is suggested that the law be amended so as to provide that hereafter any person intending to emigrate to the United States shall produce to the United States consul nearest him evidence from the proper local authorities satisfactory to the consul that he has not been convicted of any crime, that he has not at any time been a public charge in the country where he lives, nor has he at any time received public assistance; and, further, that he produce a certificate from a legally qualified resident physician to the effect that he is at the time suffering from no contagious or epidemic disease or disability such as would make him a public charge. On the production of these certificates to the consul, he shall issue to the intending immigrant his certificate to the effect that the foregoing evidence has been furnished by him and placed on file at the consulate. This paper should also set forth whether the immigrant intends to become a naturalized citizen of the United States or merely a temporary inhabitant, the certificate to be given to the immigrant, and on his arrival in this country taken up by the proper officer at the port of destination.

This course would at once place the immigrant under the surveillance of the proper officer of the United States, would effectually shut out the criminal classes, and operate very much for the relief of the inspection bureaus at our ports of entry. At this time there is no medical inspection whatever of immigrants except at the port of New York, and that circumstance will no doubt have a tendency to increase the influx at the other ports.

Important as these propositions are to the country at large, they are even more so to the South, which is establishing steamship lines to various foreign ports which will ere long be bringing in emigrants from them. The recent disturbances between the colored and the foreign laborers in the phosphate district adjoining Charleston was an illustration of what might become frequent occurrences were cheap imported labor to be put side by side with that upon which the South has always depended. The problem of colored labor is adjusting itself, but should railroads, mine owners and other employers of large bodies of men in the South draw upon the immigration depots of the chief seaports for their labor supply, it would take but a short time to create anarchy and confusion where now everything moves forward steadily with but a minimum of friction.

Our national quarantine system has proved effective in guarding against epidemic diseases. What we now need is an equally effective law that shall ward off a vicious, a criminal, an insane and an idiotic immigration.

HAVE you real estate notes, municipal or county bonds that you want to convert into cash? If it is a Southern note or bond you can advertise it free, four times, in the MANUFACTURERS' RECORD.

Appropriation for the Mississippi.

The adjournment of the House committee on rivers and harbors until the second Friday in January without taking any action towards framing and reporting a general river and harbor bill, is equivalent to a notice that none will be framed this session. The statement made by the chief engineer of the army that there were funds enough in hand for all the work that could be done next season probably influenced the committee to refrain from any action at this short session.

There is no reason why this should prevent the friends of the Mississippi river improvement from pressing the \$9,000,000 appropriation asked for in the independent bill presented by Representative Coleman in the House and by Senator Gibson in the Senate. On the contrary, these are urgent reasons why the most earnest efforts should be put forth to secure its passage. The chief of these is that the next House of Representatives will have an unusual number of new members, many of whom will go there filled with the notion that true statesmanship consists in voting against all except absolutely necessary expenditures of the public money. It will be useless to try to convince them that continuous work on the Mississippi river is a national necessity, and that it will benefit the most remote as well as adjacent communities. Men who have spent their lives in communities where State appropriations of ten thousand dollars are considered extremely liberal, and where one of a hundred thousand dollars would probably change the personnel of the next legislature, would be frightened at the bare suggestion of voting to appropriate even one million dollars for a river improvement. To leave this appropriation to the Congress that will meet a year hence will be to risk the stoppage of this important public work just as soon as the present appropriations are expended. It should be borne in mind that the nine millions asked for will not be drawn from the treasury all at once. On the contrary, the intention is to provide ample funds for continuous work for the next three or four years, with an expenditure of not exceeding \$3,000,000 annually.

The Congress now in session understands this necessity. A majority of both houses would undoubtedly vote for it if it were brought up for action. But if the States and cities most directly interested in this vitally important improvement do not promptly and vigorously insist upon the consideration and passage of this \$9,000,000 bill, Congress, pressed by a miscellaneous multitude of suitors for other measures, will let this one of gravest importance go by default.

To SOUTHERN corporations, bankers and brokers: The MANUFACTURERS' RECORD will give investment offerings four insertions free, announcements not to exceed one inch in space.

GAS COALS OF THE SOUTH.

[Written for the MANUFACTURERS' RECORD.]

Among the papers presented at the recent annual meeting of the American Gas Light Association was a very able treatise upon the gas coals of the United States by Mr. H. C. Adams, secretary of the Westmoreland Coal Co. There are few men so well qualified to handle this subject, and Mr. Adams' paper is deserving of a much wider publicity than has yet been given to it. As Mr. Adams dealt in detail with the gas coals of the South, certain portions of his paper are of particular interest and import to the many men who are at present interested in everything that treats of the mineral resources of the great South. As the largest producer of gas coal Pennsylvania is properly given first consideration, and Mr. Adams describes in careful detail the great Pittsburgh bed, which underlies the southwestern corner of the State. The available Pittsburgh coal bed, in its entirety, is estimated to cover an area of 25,000 square miles, say 5,000,000 tons of steam and gas coals. Of the gas coal but a very small percentage has been mined out, and within the area of the bed there is at the lowest estimate some 1,345,000,000 tons of virgin gas coal of the finest quality, sufficient to supply the whole United States for centuries to come.

WEST VIRGINIA GAS COALS.

Assuming this to be the chief gas coal region of the country, Mr. Adams allots to West Virginia the other two of the three principal regions. The coal measures of West Virginia are of the same general system as those of Pennsylvania, of which they are an extension. In the northern part of the State we find the Pittsburgh bed, and in the southern part the lower measures furnish the seams. So far as gas coal is concerned, two great divisions may be made in West Virginia—(1), the West Virginia region, lying in the Monongahela valley, in the northern part of the State, and including the counties of Monongahela, Marion, Taylor and Harrison; (2), the Kanawha region, lying in the valley of the Great Kanawha river, in the southern part of the State. The coals of the West Virginia region appeared in the market early in the history of gas making, and were among the first United States coals carbonized. In this portion of the Monongahela valley the coal is everywhere accessible, dipping so slightly in the broad basin that only one shaft has been found necessary in the entire district. Fairmont, in Marion county, may fairly represent the center of the region. As we go thence down the Monongahela we find the quality of the coal deteriorating and becoming more sulphurous and impure. Following the valley to the south, below Clarksburg, we find the seam thinning out and the coal falling in value. At Clarksburg and Fairmont, and between these points, the coal is a magnificent seam, running from 8 to 10 feet of clean coal. The coal is nearly equal to that of the Pittsburgh bed of Pennsylvania in density, its lustre is bright and resinous, and it has the same general characteristics of the Pennsylvania coal, though its lesser density does not enable it to bear transportation so well. Its chief element of inferiority to Pennsylvania coal is its higher sulphurousness.

The two mining centers are at Fairmont, in Marion county, and Clarksburg, in Harrison county, and around these two towns are grouped the principal mines of the district. Locally the gas coals of the West Virginia region vary so that it is hard to give a general statement of their chemical composition. An average of a large number of analyses of the standard coals gives the following approximate determination:

Volatile matter.....	35 to 40 per cent.
Mixed carbon.....	53 to 57 per cent.
Sulphur.....	1 per cent.
Ash.....	4 to 7 per cent.

THE GREAT KANAWHA REGION.

Passing on southwestward we come into the great coal field of the Kanawha valley. The containing measures here are the equivalent of the lower productive, namely, the Freeport and Kittanning, of the Pennsylvania series, and are of great thickness and commercial value. The Pittsburgh seam does not enter to any considerable extent the field of the Kanawha valley operations. Its outcrop or limit passes southwestward through almost the center of the State, strikes the Kanawha river near the western boundary line of Kanawha county, passes on down into Campbell county and turns thence northwestward into Ohio. The Kanawha river, which defines the important region to which it gives its name, has its head-waters in North Carolina, thence they flow northward across the western half of the State of Virginia, and, entering West Virginia near the point where Mercer, Monroe and Summers counties join on the State line, flow northwestward across the southern half of the State to Point Pleasant, where they meet the Ohio river. The Kanawha proper extends only from the Ohio to its junction with the Gauley river near Kanawha Falls. Above that it is known as the New river.

STEAM, COOKING, GAS AND CANNEL COALS.

The New and Kanawha rivers run in a deep and narrow canon, which they have worn down through the lower productive measures, exposing the various coal seams at successive levels along their precipitous banks. Along the New river on the east lie the great fields of steam coal to which that stream has given its name, while on the Kanawha proper, from Kanawha Falls to Charlestown, and extending about 30 miles north and south of the river, is the gas coal region, or the area of best gas coals. There are exposed in that district four or five seams of coal along the river bank, the lower one lying, to take a typical section, some 20 feet above the river level and containing 4 feet to 4½ feet of good bituminous coal. Then, next above, perhaps 100 feet above, comes the second seam 6 feet 7 inches thick, containing the gas coal. Further on, at 500 or 600 feet elevation, is found a vein of splint coal, about 100 feet above which, in a splint seam some 6 feet thick, comes in the famous cannel of this region. Capping all, about 800 feet above the river, is found a seam of some 6 feet of block coal. Thus, taking a fair example of the river bank, we see an extraordinary exhibit of seam upon seam of coal of different but all of good quality exposed at accessible points and all of workable thickness.

The gas coal seam, which is known as seam No. 2, runs from 4 to 7 feet in thickness, made of three benches with clay partings, and with seams of splint 4 to 14 inches thick interstratified. The coal itself is clean, with a clear, black, resinous lustre, of cubical cleavage and conchoidal fracture. Its density is not quite so great as that of the Pennsylvania gas coal, and it is more highly sulphurous, but, with those two exceptions, it is quite the peer of the Pittsburgh coal, giving a large yield of high-candle gas and having a very low percentage of ash.

This region possesses very valuable facilities for shipment to the markets of the East, West and South. The United States Government has built a very complete and extensive system of free slack-water navigation on the Kanawha, similar to that of the Monongahela, and by means of this the Kanawha coal is shipped at very low rates to points along the Ohio and Mississippi valleys, where it has become a large and very dangerous competitor of the Pittsburgh shippers. The only rail carrier of these coals from the mines is the Chesapeake & Ohio Railroad, which takes them to the markets of the West and Northwest by way of Point Pleasant. To the Eastern

market they are carried by rail to Newport News and shipped thence by vessels to the various gas companies of the Atlantic seaboard. Analyses of the products of some of the various gas coal mines in this region give the following determination:

Volatile matter.....	35.1	40.42	34.91	33.92	27.35
Carbon.....	64.9	56	61.75	61.96	56.25
Sulphur.....	1.48	(not given)	0.5	1.35	
Ash.....	2.	3.	2.40	2.33	3.83
Water.....	1.	50 (not given)	1.12	1.25	

Valuable deposits of cannel coal occur in this region, chief of which is in the neighborhood of the town of Cannelton. These deposits are as usual in the form of pockets and generally of limited area. The cannel is found interstratified with splint or bituminous coal, and of varying thickness, although at Cannelton it gives 3½ feet. These cannels are of the usual dull gray slate color, and lie in the vein in layers with a well-defined parting. Owing to their density and position they are expensive to mine. They are extremely hard and difficult to break in a vertical plane. Horizontally they break with greater readiness, showing conchoidal fracture. Originally this coal was mined for distillation for oil, but about 1873 it was brought into the market as a gas-enricher, where it has since held a position as one of the standards.

IN NORFOLK & WESTERN TERRITORY.

Very recent research on an extended scale along the line of the Ohio extension of the Norfolk & Western Railroad, northwest from Pocahontas, Va., to the Ohio river, through Martin county, Ky., and Wayne and Logan counties in West Virginia, has justified the early inference of Mr. E. V. D'Invilliers, that substantially similar conditions as regards coal would be found in that region. Coals have been disclosed high in volatile matter, and, so far as analysis and physical characteristics go, suggestive of valuable gas coal. They have not yet, however, been submitted to test in gasification, so that all that can be said is that it is likely that that district contains a large area of gas coal.

Investigations pursued in the southeastern end of the field, in the valleys of Coal creek in Tazewell county in Virginia, and in adjacent districts along the Clinch Valley Division of the Norfolk & Western Railroad, show that of the three seams generally exposed, one gives indications of a good gas coal in seam likely to average 3 feet clean. The analysis of samples indicates good coal, and so far tests on a small scale have borne out the properties of the analysis.

There are in North Carolina two small areas of triassic coal. Little work has been done in these fields of late years, but some of the coal, from what is known as the Deep river field, has been used in gasification, with results said to be satisfactory.

THE FAMOUS CANNELS OF KENTUCKY.

Kentucky, in her eastern counties, is rich in coal veins. Her coal measures are tilted over at an inclination that exposes successively their whole section. A dozen or more seams are found, all persistent and recognizable, in different localities. Nearly everything but anthracite is found here, the principal formations being splint or block coal, and free-burning non-coking bituminous. Good coking coals are found, but gas coals are a rarity. These same conditions characterize the western region of Kentucky. Of Kentucky it may be said that no other State has such a large area of rich and thick cannel. They are found in both the western and eastern fields, and of good quality in nearly every county that is underlaid with coal. The best cannels of the eastern field are generally found on what is known as seam No. 4 of the upper coals, but it is impracticable to relegate the best cannel to a particular seam, so difficult is the determination of their equivalency. The cannel are found here, as elsewhere, in pockets of variable extent in area, and of no uniformity in

thickness; hence, any estimate of their area in any locality is largely conjectural. The vein is generally very thin, running from 18 inches to 3 feet, and composed of superimposed thick lamina, like slabs of slate laid one upon another, underlaid by inferior shale of bituminous coal and clays.

Through these underlying strata the undercutting is done. The mining is generally very difficult and expensive. The color is the familiar dull, slaty gray, with, at times, highly polished fractures which is always conchoidal. The coal is remarkably dense and tough, which enables it to resist the rough handling of transportation and admits of its being carried the longest distance in good condition. The chief carrier through the State is the Chesapeake & Ohio Railroad, though those coals along the Ohio river are shipped on barges to the Western and Southern markets. In some instances these cannelles were first developed for the distillation of oil prior to the discovery of the large fields of free natural oil, as many as 120 gallons of oil being distilled, it is said, from one ton of the best of these coals. In the eastern field, Greenup, Carter, Boyd and Johnson counties are the principal producers of cannelles, though in the center of the field, about the head-waters of the Kentucky river, in Breathitt and adjacent counties, excellent deposits are discovered. In the western field, Hancock and Breckinridge counties are the chief producers, and are famous the world over for the excellence of their coal. The best of these coals compare favorably with the best English cannelles and approach the celebrated Australian shale, and are already shipped to foreign countries in competition with them. The character of the cannelles from the different counties is indicated by the following analyses:

	Pike.	Perry.	Breathitt.
Volatile matter	43.4	44.16	68.28
Carbon	46.3	49.4	53.8
Sulphur	.689	.766	.722
Ash	8.3	6.	3.64
Hancock and Breckinridge. Greenup.			
Volatile matter	.60	77.5	47.46
Carbon	27.00	21.05	38.84
Sulphur	1.89		1.35
Ash	12.10		13.40

THE TENNESSEE COAL MEASURES.

The coal measures of Tennessee are an extension of those of Kentucky, and, entering from that State in a belt some 70 miles wide, continue the general southwest trend across the State, generally narrowing until they enter Alabama, cutting across the extreme northwest corner of Georgia. They occupy and are entirely confined to the great plateau of the Cumberland mountains, a vast narrow table-land running entirely across the State north and south. This field may be divided into northern and southern divisions. In the southern the coals are of a semi-bituminous character, and generally quite soft and friable and extensively mined for the manufacture of coke; but towards the northern border of the State, in Scott, Campbell and Anderson counties, some very good gas coals and some excellent cannelles are found. These coals lie in the upper coal measures, in which are found in this district some eighteen or more seams of coal, all varying in thickness and quality, and changing at times from bituminous coals to cannelles or shales, as in the Kentucky fields. In the vicinity of Jellico mountain, in Campbell county, is found an excellent grade of cannel, which has been extensively shipped through the country for the purpose of gas-enriching. The deposit is estimated to cover some 1,200 acres. The composition of this coal is as follows:

Volatile matter	49.85
Carbon	35.03
Sulphur	.74
Ash	15.12

A very good gas coal, perhaps the best in this district, is mined in the southern part of Scott county. It is said to be quite similar to the best Pennsylvania coals in general physical characteristics and to approach them in value for gasification. The coals found in the adjacent county of An-

derson are likewise of excellent quality. These coals are supplied principally to the local Southern markets, and are not extensively shipped as gas coals beyond the limits of the State.

ALABAMA'S GREAT COAL FIELDS.

The Warrior, Cahaba and Coosa coal fields of Alabama, so named from the rivers by which they are drained, contain an estimated area of 8,660 square miles of coal measures, in numerous seams of varying thickness. These measures are of astounding thickness (in some places 3,000 feet), and containing 30 or 40 seams, aggregating nearly 50 feet of coal. In the Cahaba field, in Bibb, Shelby and part of Jefferson and St. Clair counties, the coals are generally semi-bituminous and adapted for coking, though in some districts the volatile matter rises to 35 per cent., and the coal is reputed to serve for gas-making. The coals of the Coosa field, lying to the east and northeast of the Cahaba, are of the same character, and are best suited for coking. In the great Warrior field, whose area is ten times as large as the other two combined, we find the principal deposits of good coals of all bituminous varieties—coking, gas, block and splint. This field lies principally in Jefferson, Walker, Fayette, Marion, Winston, Cullman, Blount and Tuscaloosa counties. In Jefferson county is the principal coking region, where the coals for that purpose are taken from the famous Pratt, Black Creek and Newcastle seams, ranging from 2 feet 6 inches to 4 feet 6 inches. The coals are too low, however, in volatile matter to rank as gas coals.

In Walker county the coals are all highly bituminous, of the nature of gas, block and splint. The seams are horizontal, thick and numerous. There are 35 seams over 18 inches in thickness and 6 over 4 feet. The only commercial gas coal, properly speaking, is found in a deposit covering about 15,000 acres in the southwestern part of Walker county, in what is locally known as the Corona seam. It is mined in the Coal Valley, Cane Creek and Wolf Creek regions. The seam runs 3 feet 6 inches to 3 feet 8 inches thick, with one slate parting. The coal is clean, hard and bright, with bright, resinous lustre and of a sufficient density to bear handling well. It has rectangular cleavage, and comes out in cubical blocks resembling very much the Pennsylvania gas coals. This coal is supplied largely to the gas companies throughout the State and in the adjacent States along the Gulf. The composition of these Walker county gas coals is as follows:

	Corona District.	Coal Valley.
Volatile matter	37.74	41.12
Carbon	58.81	50.67
Sulphur	1.95	.42
Ash	9.99	7.36
Cane Creek. Wolf Creek.		
Volatile matter	33.78	37.73
Carbon	57.	58.81
Sulphur	.73
Ash	6.96	1.95

Occasional thin streaks of cannel run through these seams of coal, but as they are not of workable thickness they have little commercial value or importance.

THAT copper ores were to be found just south of the Virginia line, near Blue Wing, in Granville county, North Carolina, has long been known. This belt extends through the northwest corner of that county into Halifax county in Virginia. The Atlantic & Danville Railroad has opened up a rich country to enterprise, and has called attention to its varied mineral resources. A correspondent of the Raleigh News and Observer reports that an unusually rich vein of copper ore carrying more than 50 per cent. of that metal, also considerable gold and silver, has been discovered within a few hundred yards of the railroad station at Virginina, Va. There are other ore veins in that vicinity. It is quite probable that this village will become an industrial town if further development shall demonstrate that those rich ores exist in large quantities.

A GOOD YEAR FOR TREDEGAR.

Steady and Solid Advancement, But No Boom.

All the Industries Progressing Nicely—Fine Outlook for 1891—An Ideal Winter Resort, with Plenty of Chances for Money-Making.

[Special Cor. MANUFACTURERS' RECORD.]
TREDEGAR, CALHOUN COUNTY, ALA.,
(P. O. Jacksonville), Dec. 20, 1890.]

One of the peculiarities of the Man and Brother of African descent is his fierce determination to "take Christmas." In the old days of bondage, when his material condition was better and the white man's worse than it is now, he had the week between Christmas and New Year Day all to himself, and might consider himself free for the time being. In these days of citizenship the American African thinks it would be a mark of servitude if he consented to work during the holidays, and accordingly he doesn't, or at least so few of him do that it is not worth mentioning. Wherefore this Saturday night, the same being the date first above written, practically represents the wind-up of work for the year A. D. 1890. To-morrow will be Sunday, when no man worketh, and the two days following before Christmas are considered too convenient for purposes of preparation by our dusky brethren to admit of the thought of labor. The first day of the new year will find them all on hand and eager to make a lucky start again, but Ethiopia will celebrate enthusiastically, if not appropriately, from now until long after midnight of the thirty-first.

Tredegar is getting ready for an old-fashioned Christmas time. The year has been so fraught with success and prosperity that there is a general feeling of thankfulness approaching to hilarity. Old-time Southern hospitality is never so aggressive as at this comfortable season. Active preparation is observed on all sides. The County Hunt Club is preparing a programme for the week that promises disaster to sly Reynard, and a large supply of brushes for next year. The Calhoun Possum Association, whose "possum and yam tater" dinner last week was an event of the season, anticipates a grand *battue*, while the Tredegar Gun Club expects to wreak slaughter upon sundry turkeys wild and droves of deer. The mansions of the county gentry will resound with merriment, and their gencorous boards groan under loads of good cheer, in their accustomed way. People down East and out West where, if reports are to be believed, the times are dull if not hard, may feel depressed, but in the South, and especially around Tredegar, the harvest has been plenteous, business good, profits beyond expectation, and it is not to be wondered at that the community should

hail the great feast of the Christian year with joy and gladness. That this is the sentiment is seen in the rapid "homing" of distinguished Tredegarians from National and State capitals to join in the jollity of a genuine, old-fashioned, Southern home holiday. The cruel axe is already hewing at shapely pines and cedars. Holly and mistletoe are traveling townward in wagons to deck churches, schools and home nests, and the "cares that infest the day" are pulling their tent pegs preparatory to a commendable *hagira*. Business is little thought of, nor will it be until the dawn of the day when everybody will be spoiling letter-heads trying to learn to write "1891" on the date line.

It hardly needs be written that the year 1890 has been the red-letter year of this place. During the nine months of it nearly past about everything has been done in the way of progress and improvement that is now to be seen. The important discoveries of manganese and bauxite have

been made, a number of new iron mines opened and prepared for practical development. The Mining and Manufacturing Company has inaugurated its splendid system of wide and beautiful streets and avenues, paved with the snowy white Tredegar mountain gravel, as durable as brick and as smooth as asphalt. Several miles of these thoroughfares have been or are nearly completed, and the work is to be prosecuted on an enlarged scale hereafter. The great resources of Tredegar in superior building stones of considerable variety and remarkable excellence have been brought to notice, and the first of the important quarries convenient to transportation is now under active development. About 20,000 cubic yards of this material has been contracted for use in foundation work for the Tredegar steel plant, and a shipping demand is rapidly growing up in the larger cities of Alabama and neighboring States.

A year ago not a brick was made in this locality, and not until after the Tredegar development began at the close of last spring. Now the Tredegar Brick Works are turning out 25,000 finished brick per day, and will double their capacity early in the year. In addition to these pioneer works, another, a 100,000 brick plant, is to be started as soon as the plant can be brought on. Building operations are active all through this district, and half a dozen large plants working on the exceptional Tredegar clays could find ready markets for all they could produce, both here and along the railway lines. We have a cotton-seed oil mill, ginnery and fertilizer factory, planing mill, lumber mills, room for more of both kinds, and a good opening for sash, door and blind factory, shingle and lath mills, furniture, wagon and carriage factories, more tanneries, harness, saddlery and shoe factories, foundries and many small industries.

During the past few weeks the organization of the Tredegar Cotton Manufacturing Co. has been progressing at the East under New England auspices. It is expected that the matter will be in condition to justify breaking ground by early spring.

One of the most important accessions to the prosperity of Tredegar under the new regime, has been the foundation of the Tredegar National Bank, which began business last summer and is in a flourishing and growing condition. This enterprise is largely owned by leading Vermont capitalists interested in the Tredegar and allied movements. During the coming year it is probable its capital will be increased and at least doubled. A company has been organized and capital subscribed for the establishment and operation of an ice factory and cold-storage plant. Arrangements have been made to have these facilities available before warm weather. Work on the new hotels has been necessarily deferred, owing to the impossibility of securing brick for some time to come, several weeks at least. All the brick being produced at present are badly needed for the plants and business houses in course of erection or under contract. Meantime, the elegant Tredegar Inn, controlled by the company, together with the Jacksonville House and several comfortable private hotels, are carrying the business satisfactorily, although our present hotel facilities are closely crowded.

Already nearly a mile of the Tredegar mineral tramway system has been graded and laid with rails. This section will be in operation probably next week, and is very active operation by January 1, when the full force of builders, quarrymen and laborers shall be working again. The final development of the manganese mines which has awaited only the complete organization of labor for the steel plant construction and other imperative matters, will be now taken up, with a view to readiness for the erection of the ferro-manganese

plant, arrangements for which are nearly perfected. Work on the bauxite deposit will be put in hand at the same time. Among the many valuable properties of the company is included probably the most valuable limestone quarry in Alabama. One of the first movements of the year will be the development of this property on a large scale, as a productive commercial enterprise.

A number of the iron mines are listed for further development, and everything is planned for an active year, which may be counted upon to produce results of the most satisfactory kind. The new company offices, the new bank building, new public warehouse, Opera House Block, Masonic Temple, all near the new hotel, and many other edifices will be on their way up shortly, and the prospects for business, employment and bustle were never so good anywhere.

Much of this encouraging situation is doubtless due to the conservatism of the promoting company, whose management has regularly set its face against excessive real estate values, and especially against booms. Time and again the temptation to "let her go" has been exasperatingly alluring, but both observation and experience are teaching the lesson that disaster will follow every too liberal discount of the future, and that there can be no safety in prices based on promises or speculations upon future importance. The safe theory and practice appears to be always to build your town and let good lot values result as a natural sequence. Following this course, real estate values in Tredegar have been steadily but legitimately advancing with the growth of the place, with the progress of public and building improvements and with the establishment of industries. As a result, everybody has made money who has touched Tredegar property, and yet the present basis of values is low enough to constitute a working "ground floor" for future operations. Central business property quotable at sixty dollars per front foot could just as easily have been boomed and held at three times that figure. At present prices half a dozen neat profits have been made, and it is not at all improbable that as many more will be between Christmas and the Fourth of July.

While wintry winds and blizzards are doing up the inhabitants of the East and North, we are enjoying bright, genial, dry October weather. This is the perfection of climate anyway. It is a place to spend the winter, with everything to make life delightful and to make all the expenses too. That should appeal to the shrewd business sense of gentlemen who at once like to put in a winter at the South, and a little "flyer" which will cover the cost. Tredegar is the exact spot where that can be accomplished. Come, therefore, and sun yourself, fattening your pocket-book the while.

GOLDSMITH BERNARD WEST.

A BILL is before Congress to authorize the Arlington & Mount Vernon Railroad Co. to construct a bridge across the Potomac at the "Three Sisters," just above Roslyn, and to run electric cars over the same through the Arlington estate. The Virginia legislature has already granted a charter to the same company to build a road through Alexandria county, Washington, and Fairfax county to Mount Vernon. But, unless Congress gives authority for the construction of the bridge and for crossing into Washington, the other charter will have no value.

THE Key West Investment Co. has opened its principal office in New York. This corporation has been chartered with an authorized capital of \$800,000, to purchase, lease and improve real estate at Key West, Fla. The trustees for the first year are Charles J. Conda, James B. Metcalf, James A. Waddell, John A. Waddell and Ferdinand E. Conda.

GENERAL NOTES.

THE removal of the general offices of the Tennessee Coal, Iron & Railroad Co. from Nashville, Tenn., to New York city will be a great convenience to the majority of the stockholders of that corporation as well as to those officials who administer its financial affairs. This company owns vast and very valuable properties in Alabama and Tennessee, and can control their operations from New York quite as well as from Nashville, while, with all their books, papers and reports in New York, the company will be able to exhibit to stockholders, to bankers and to capitalists the exact condition of their business whenever called upon to do so.

THE Memphis Appeal-Avalanche presents its readers with a souvenir edition commemorating the fiftieth anniversary of the founding of the Appeal. As a work of art it ranks among the first of such productions, its covers being highly illuminated with choice pictorial representations of the Appeal's progress in the last fifty years, and of the city of Memphis during that period. The valley of the Mississippi is shown in colors, with rail and water-ways correctly given, and the lines in every instance finely drawn. Its contents embrace 32 pages of well-written text, setting forth the past, present and future of the Appeal and Avalanche, which joined issue in November, 1890. The reminiscences of Col. Matt Galloway are most interesting, and his editorial career on the Appeal and Avalanche faithfully chronicled. A leading feature is the beauty of its pictures in half-tone, embracing views of the Mississippi north and south of Memphis, and the collection of portraits of leading representative citizens of that city. This souvenir will be readily accepted throughout the country as a bright production of one of the leading progressive newspapers of the Southwest.

MACON, one of the older cities of Georgia, and the capital of Bibb county, occupies a central position on the dividing line between the lowland and the mountain counties of that State, and is nearly equidistant from the Appalachian range and from tide-water. The city is surrounded by fertile valleys and gently rising uplands. The Ocmulgee river runs around and through a part of it. The climate is salubrious. The mean temperature of the winter and early spring months is 58.8, and the mean annual temperature for five years has been 63.66. No epidemic has ever obtained a footing there. Once small steamers did most of the transportation, but of late years railroads have largely taken their place. Of these there are nine now in operation and soon two others, now under construction, will increase the number to eleven. Macon is a city of some large and numerous small manufactories. Among the former are 3 cotton and 2 knitting mills, 3 furniture and 1 spoke and hub factory, 4 large iron foundries, 4 planing mills, 3 immense car shops, a grain elevator, a cotton chopper and a box factory, and 2 cotton-seed oil mills. For many years cotton has been the staple crop of the fertile country of which Macon is the center, consequently it has nine cotton warehouses and two compresses (a third to be ready in time for next season). Eight banks with an aggregate capital of several million dollars; a fine public school system; colleges, academies and other high-class educational institutions; churches of all the leading denominations, and members of secret societies provide for the financial, educational, religious and social needs of the community. With such modern convenience as gas works and electric lights, water works, telegraph and telephone service, hotels and theatres, daily newspapers,

public parks, electric street cars and others that might be named, Macon is well provided. With all these advantages in her favor, Macon has only to publish them to the world to attract to herself many other industries and hosts of enterprising people that will increase her business, wealth and population.

TREDEGAR, ALA., has made such progress that the passenger department of the East Tennessee, Virginia & Georgia Railway Co., has considered it worthy of special notice as one of the special attractions on that system. This has been given in the form of a neatly printed and beautifully illustrated pamphlet of 32 pages, which in pleasant style tells where and what Tredegar is, and what are the foundations for the universal belief that Tredegar is destined to be one of the greatest industrial cities of the South. A map of this great railway system on the last page shows the location of this new industrial city in Alabama.

NASHVILLE, TENN., has done a flourishing business during the current year. The annual report of the Merchants' Exchange shows the Nashville flour mills output daily 3,000 barrels, and \$1,000,000 capital invested in them paid up. Three cotton mills have 44,684 spindles, 1,318 looms, employ 1,034 hands, consume 13,370 bales of cotton and turn out cotton cloth, cotton yarn, twine, thread and seamless bags. Ten circular and seventeen band saw mills have a daily capacity of 624,000 feet. During the year ending September 15, 1890, 250,000,000 feet of lumber were handled in this market, and the capital invested in the lumber business and woodworking is \$4,500,000.

THE Real Estate Exchange of Nashville, Tenn., is about to issue a call for a convention to meet in that city next February, to be composed of delegates from all the real estate exchanges of the United States and Canada. The purpose of this call is to organize an International Real Estate Congress.

THE Baldwin Locomotive Works contracted, some two months since, to build 17 freight and 10 passenger train locomotives—27 in all—for use in Australia on roads owned and operated by the English Government. Heretofore those railroads have received their locomotives from England, but it has been found that they were not as well adapted for mountain climbing and for turning sharp curves as those made at the Baldwin Works. The last of these engines will be finished in February, and all will then be shipped from Philadelphia by a 5,000-ton British steamer chartered for the trip. The average price is \$10,000, so that this contract amounts to \$270,000, which is one of the largest foreign orders ever filled at the Baldwin Works. The Baldwin Co. sends locomotives to all countries in the world, and turns out three daily. It has this year made over 900, and has plenty of contracts ahead.

IN the counties of Johnson and Carter, in East Tennessee, and in those that adjoin them in North Carolina, lies the Doe mountain iron district. Welsh miners have made cuttings in the vein in Johnson county a distance of 11 miles, and find that it varies from 75 to 120 feet in thickness, with an unknown depth. A Johnson City correspondent of the Knoxville Journal states that this property is owned by Philadelphia and Bristol capitalists, who value it at \$2,500,000. The Bristol & Elizabethton Railroad was intended to develop this property. The owners of the iron mine are building the furnace at Bristol. The same correspondent states that the Virginia, Tennessee & Carolina Coal & Iron Co. own other large ore deposits in Johnson county at the mouth of Roan's creek, where they have a force of miners at work

whose pay-roll amounts to more than \$600 a week. The same company is said to be expecting to build one or more iron furnaces at that point. They are reported to control the mineral rights to 80,000 acres of iron-bearing land in that district, and to own over 200,000 acres of coal lands in Kentucky and Southwestern Virginia.

RAILROAD engineers, while running a line through Boone county, West Virginia, discovered, on the face of a mountain on the Pond fork of Coal river, the outcrop of 11 distinct veins of coal, ranging from 3 inches to 20 feet in thickness, and aggregating 68 feet and 11 inches. A correspondent of the Wheeling Intelligencer, who reports this discovery, says: "One vein is pure cannel coal, 42 inches thick; another has 34 inches of pure cannel coal overlaid with splint coal, and another vein of bituminous coal is 20 feet thick with a foot of 'parting' 7 feet from the bottom." Other railroad engineers, according to the same correspondent, "have lately traced the Pocahontas field of coking coal from the head of the Guyan river, where it was supposed to end, across Indian Ridge to Pinacle, Otter and Barker, across all the forks of Guyan river, through Wyoming county, across into Raleigh, and following the Peney valley through Fayette county into the familiar New river coal country. Through this entire section there are from two to five workable veins of coal, one of them 10 feet thick. In some places they dip a little below the water level, but the outcroppings, as a general thing are to be seen on the mountain sides." * * * "Immense tracts of coal and timber land are being bought up by the capitalists. A short time ago Morgan, Drexel & Co., of Philadelphia, representing the Vanderbilt interests, purchased 50,000 acres of coking and coal land in Raleigh county, and have already completed a railroad survey. The Chesapeake & Ohio Railroad Co. has also bought large tracts and has an engineering corps out laying down a new railroad line. The Baltimore & Ohio people are also endeavoring to get a share of this undeveloped wealth, and have purchased 76,000 acres of coal lands from ex-Senator J. N. Camden. The syndicate represented by James G. Blaine, Senator Gorman, ex-Senator Henry G. Davis and others have also made large purchases, and many smaller purchases of 10,000 and 20,000-acre tracts are constantly being made throughout the coal and timber regions of the State."

MOUNT LYNN, TEXAS, is the name of a new town adjacent to the flourishing city of Waco, which has been laid out by a company composed mainly of New England men, who purchased the property and incorporated under the laws of Maine as the Boston-Waco Land Co., authorized capital \$1,000,000. The officers are: President, M. W. Halsey, president Prudential Loan & Trust Co. of Boston; vice-president, Fred. L. Coburn, of Coburn Bros., Boston; treasurer, H. H. Savage, president Boston Land Improvement Co., Wakefield, Mass.; secretary, Wilfred B. Rich, Esq., Boston; bankers, Suffolk Trust Co. of Boston and Provident National Bank of Waco. Mount Lynn is the highest point west of Waco, from which it is 2½ miles distant. Its elevation gives it commanding views of the country for many miles. The purpose is to make it a suburban residence city, and to establish a sanitarium, the pure air and the hot water from subterranean springs both warranting this enterprise.

GRANITE of fine quality abounds in the vicinity of Salisbury, North Carolina. Three quarries have been opened, and many more could be if capitalists were to become interested in that industry in Rowan county.

ANTIETAM

NOW KNOWN AS

SHENANDOAH JUNCTION,
WEST VIRGINIA.

* "The Best Unoccupied Town-Site in the South." *

THE ANTIETAM MANUFACTURING & LAND IMPROVEMENT CO.

Organized under a West Virginia charter, has secured at the crossing of the main line double track Baltimore & Ohio Railroad and the Shenandoah Valley Railroad, a large town-site and valuable mineral lands and mineral rights.

It is proposed to found here an industrial town to be called Antietam.

TOWN-SITE LANDS.

The town-site lands of the Company comprise the best and most available lands for business and residence purposes commanding this great trunk line crossing and comprise 840 acres compactly situated.

Adjoining the lands of the Company 200 acres have been secured as a site for building three of the largest and most important industries ever organized in the Southern States—establishments which will employ several thousand hands, mainly skilled workmen.

Will Employ 4,200

Hands, Skilled Labor,

With a Pay Roll of

\$8,500 per day.

Other Industries

Secured.

Room for More.

Other industries arranged for will employ about 500 hands.

The completion of these various works will give immediate foundation for a prosperous industrial town of 20,000 to 25,000 people.

This is in no sense an acreage enterprise, nor a boom town. Nature has made Shenandoah Junction the upper gateway and cross line point of the great valley extending from Harrisburg, Pa., to Chattanooga, Tenn.

The Company has secured the lands which command the whole situation, and its purpose is to concentrate its efforts upon the work of building up a solid, compact town with first-class modern conveniences in water works, sewers, gas, paved streets and substantial buildings.

A 300-TON STEEL PLANT.

The first in importance of the great industrial establishments to be erected is a 300-ton steel plant, which will include rolling mills to work up the product of the furnace into finished, merchantable steel. This plant will be operated by a direct continuous process which permit the making of steel from non-Bessemer as well as Bessemer ore.

The product of this plant will have a value at the mills of not less than \$12,000 a day.

PLATE MILL.

A plant for making "Russian" sheet steel and also for converting sheet steel plates into a new product impervious to the action of acids, chlorine, alkalies or sulphur. Will employ about 1,000 hands; pay roll \$2,000 per day. Will work up about 150 tons per day of sheet steel. The plate mill company have all the

RUSSIAN PROCESSES

so long kept secret from the world, and have in addition original processes for converting sheet steel into a product superior to tin plate or block tin at greatly less cost.

The third of the larger industries will be a plant for processing by lining or covering, or both, all sizes of water, gas and steam pipe, boiler and boiler plate, distillery pipes and tubes and any and all forms of iron and steel, to make it proof against weather, the chemicals of earth and air, or solutions of a corrosive character.

OTHER INDUSTRIES.

So far secured, to be located on the Company's lands, include:

First.—A foundry and machine shop.

Second.—A planing mill and sash, door and blind factory.

Third.—A carriage factory.

Fourth.—A carpet factory.

Fifth.—A knitting mill.

These industries will employ in all about 500 hands, almost wholly skilled labor.

The Antietam Manufacturing & Land Improvement Company contributes to the steel plant 1,000 acres of very valuable mineral lands and \$35,000 in cash when the steel plant shall have been one-third completed.

Capital of the three larger industries \$3,500,000. These have selected their location at Shenandoah Junction because of inexhaustible resources of iron ores, and the unlimited supply of coke and coals near at hand and the surpassing transportation facilities, coupled with the unlimited natural resources in timber, coal, iron, clay, lime, and other materials all around, and transportation to facilitate their concentration.

The Company's townsite is in the most beautiful portion of the Shenandoah valley, surrounded by rich, valuable and highly cultivated lands. It has every advantage in the way of delightful climate, healthfulness and cheap living.

WHAT THE COMPANY OFFERS.

After deducting 100 acres reserved for industries and 40 acres for park, there remain 700 acres to be cut up into 4,000 business lots and 1,800 residence lots.

Of the \$1,000,000 capital stock \$940,000 will be offered for subscription, in shares of \$100 each.

After \$50 a share has been paid—\$20 cash, \$10 in sixty days, \$10 in four and \$10 in six months—full paid and non-assessable stock will be issued for the full number of shares subscribed for.

The \$940,000 of stock will bring in \$470,000. Of this, \$300,000 will pay for the town-site lands, the 1,000 acres of mineral lands and 100 acres of valuable marble and cement lands. Thus \$170,000 will remain in the treasury for carrying on the work of development, without counting or drawing upon the proceeds of the sale of lots. The \$30,000 cash donation to the steel company does not become due until the works are one-third completed. This plant will cost about \$750,000 and consume nearly two years in building. The two associated companies can be at work in about one year.

Work on the five industries named to be put on the company's lands can go forward at once. In order to secure these the company has undertaken to subscribe \$50,000 to their capital stock. Advertising expenses, &c., are estimated at \$25,000.

With the \$95,000 which will remain in the treasury it is proposed to at once begin the erection of a first-class small hotel to cost about \$35,000, and to devote \$60,000 to

the beginning of a first-class system of water works, supplied from the Potomac. The Town Company proposes to build and own its own water and gas works.

It is believed that within six months from the first of January, 1891, 1,000 business lots can be sold at an average of \$300 each, and 500 residence lots at about the same price, which is less than 50 per cent. of what it is known many lots will be taken at immediately on the opening of the property for sale. This would substantially recoup the entire outlay and leave as surplus assets 3,000 business and 1,300 residence lots to be sold at constantly increasing prices.

A CONSERVATIVE AND PROFITABLE INVESTMENT.

We feel that this stock is well worth its par value to-day, as it is founded upon a town-site which cannot be equaled in advantages of a solid and permanent character anywhere from Harrisburg to Chattanooga. That in putting it upon the market upon the ground-floor basis named we are offering an investment that is eminently conservative, because its value cannot under any circumstances become less than its cost, while it is a moral certainty that it must soon become worth several times the full par value of the stock.

Inquiries for additional information should be addressed to Coleman Rogers, Esq., secretary of the company, at Shenandoah Junction, W. Va., or to other officers of the company.

All subscriptions for stock must be accompanied by certified checks or bank exchange on New York to the amount of the \$20 per share required for the first payment, payable to the order of "Treasurer Antietam Manufacturing & Land Improvement Co." and addressed to Coleman Rogers, secretary Antietam Manufacturing & Land Improvement Co., Shenandoah Junction, West Virginia.



Antietam Manufacturing & Land Improvement Co.

SHENANDOAH JUNCTION, WEST VIRGINIA.

B. R. HUTCHCRAFT, President.

W. F. M. McCARTY, Vice-President and General Manager.

EDWARD W. MEALEY, Cashier Hagerstown Bank, Treasurer.

COLEMAN ROGERS, Secretary.

DURHAM, North Carolina,

CONSOLIDATED LAND & IMPROVEMENT CO.

CAPITAL - - - \$1,000,000.

PRESIDENT, **JULIAN S. CARR**, Pres't, Blackwell Durham Tobacco Co.

VICE-PRESIDENT, **A. B. ANDREWS**, 2d Vice-Prest, Richmond & Danville Railroad.

SECRETARY AND TREASURER, **R. H. WRIGHT**.

This Company Owns 900 Acres of Land, 300 in the Business and Residence Portion of East Durham, and 600 in the Residence Section of Durham and Around the New Trinity College Buildings, now being erected. The First is Adjacent to Several of the Most Successful Manufacturing Plants.

The Residence Portion, Notable for Beauty of Situation, has been Platted to Secure the Best Effects.

PO EXPENSE will be spared by the Company in developing all this property. A standard gauge railroad, connecting with every railroad entering Durham, will pass through the center of the land designed for industries. A dummy line, under construction, will connect all the outlying lots with the center.

A Cotton Factory to employ 150 hands is to be built at once on the East Durham property; also a Flour and Meal Mill with a capacity of 200 barrels a day.

THE COMPANY HAS NO STOCK FOR SALE. It will offer only alternate lots, reserving others for enhancement in value by development.

Enterprises of merit will be aided by donations of sites and subscriptions to capital stock.

Some of the industries already planned are:

A Knitting Factory,	Woodworking Factory,
Furniture Factory,	Bucket and Barrel Factory,
Chair Factory,	Sash, Door, Blind and Finishing's Factory,
Wagon Factory,	Spoke and Handle Factory,
Buggy Factory,	Foundry and Machine Shops,
Refrigerator Factory,	Brick Works,

In 1856 Durham was named.

Population 1865, 90 persons

Population 1890, 8,000 persons.

In 1871 the first tobacco warehouse for the sale of leaf tobacco was established.

In 1890 it has four among the largest in the United States.

Taxable Values 1890, \$6,293,898.

Rate of taxation, city, county and State, 1 per cent.

In 1869 it had 6 manufactories, capital \$25,000.

In 1890 it has 23 manufactories, capital \$12,000,000; number of employees 2,000.

Wages paid, 1890, \$750,000; advertising, 1890, \$1,000,000; paid revenue tax one year, \$827,269.54.

Durham has three Banks—capital, \$400,000.

Surplus, 40,000.

Deposits, July 1st, 1890, 623,000.

It has three newspapers, two daily and one weekly.

DURHAM HAS —————

WATER WORKS,

ELECTRIC-LIGHT PLANT,

TELEPHONE SYSTEM,

STREET CAR LINE,

FIRE DEPARTMENT,

TEN CHURCHES (for whites),

SCHOOLS,

TRINITY M. E. COLLEGE.

Situated in the center of Golden Belt of North Carolina, comprising counties of Durham, Orange, Person, Caswell, Alamance, Chatham, Wake, Franklin and Granville.

114 miles from Lynchburg.

160 miles from Richmond.

175 miles from Norfolk.

26 miles from Raleigh.

50 miles from Sanford

135 miles from Charlotte.

55 miles from Greensboro

DURHAM'S RAILROADS:

RICHMOND & DANVILLE SYSTEM.

DURHAM & KEYSVILLE, giving close Richmond Connection.

DURHAM & NORTHERN to Henderson, connecting with Seaboard Air Line.

LYNCHBURG & DURHAM, crossing Atlantic & Danville, and connecting with Richmond & Danville, Norfolk & Western and Chesapeake & Ohio at Lynchburg.

L. & D., to be extended to Fayetteville and junction there with Cape Fear & Yadkin Valley, crossing Robinson's System en route.

Extension of WILMINGTON & WELDON SYSTEM, already ordered by that company from Stanhope, N. C., to Durham.

Manufacturers Desiring a Location where all the Conditions of Cheap Materials, Climate and Railroad Facilities can be had in a Well-Established, Well-Advertised, Prosperous Community, Should Address

R. H. WRIGHT, Secretary and Treasurer,

DURHAM, N. C.

KIMBALL.

MARION COUNTY,

TENNESSEE.

KIMBALL TOWN COMPANY.

H. I. KIMBALL,

Vice-Prest. & Managing Director.

DIRECTORS.

HON. LOGAN H. ROOTS, President of First National Bank, Little Rock.
 CHARLES P. RICHARDSON, Capitalist, Chattanooga.
 J. R. STEVENS, President First National Bank, Huntsville, Ala.
 A. J. MORISON, Capitalist, London, England.
 J. H. BRYANT, President Seattle Coal & Iron Co., New York.
 GEO. COOK, President Hallet & Davis Piano Co., Boston, Mass.

HON. H. L. COCHRAN, Judge Probate Court, Fort Payne, Ala.
 H. I. KIMBALL, Atlanta, Ga.

OFFICERS.

President, HON. LOGAN H. ROOTS.
 Vice-President, C. P. RICHARDSON.
 Second Vice-President and Managing Director, H. I. KIMBALL.
 Treasurer, J. H. BRYANT.
 Assistant Treasurer, ED. E. RICHARDSON.
 Secretary W. E. DONALDSON.
 Assistant Secretary, W. BROOKS COVELL.

ATTORNEYS.

W. E. DONALDSON, Kimball.
 SHEPHERD, WATKINS & BATES, Chattanooga.

ENGINEERS.

Landscape Engineer, NATHAN G. BARRET.
 Resident Engineer, W. J. KELLY.
 Sewerage and Electrical Engineers, NIER,
 HARTFORD & MITCHELL.

Hon. SAM'L H. BUCK, Gen. Superintendent.

OFFICES.

Richardson Building, Chattanooga.
 Union Trust Building, 80 Broadway, New York.
 Company's Building, Kimball, Tenn.

Kimball Offers

Solid, practical inducements to manufacturers. First-class enterprises under good management will be guaranteed, one-half the cash required. Local taxes will be remitted for a term of years. Lowest freights and cheapest raw materials will be secured.

Auxiliary Companies

will be organized by the parent corporation for developing the wealth of the Sequatchie Valley and for supplying the city with heat, light, water, power and transportation.

A Mammoth Industrial Building

will be erected by the Kimball Town Company, which will have power, light and heat, that will be supplied to manufacturers on the most liberal terms.

Ample provision made for religious and educational institutions.

No Further Auction Sales

this year and no private sales of the corporation's lots except to those who will contract to build immediately on plans approved by the management.

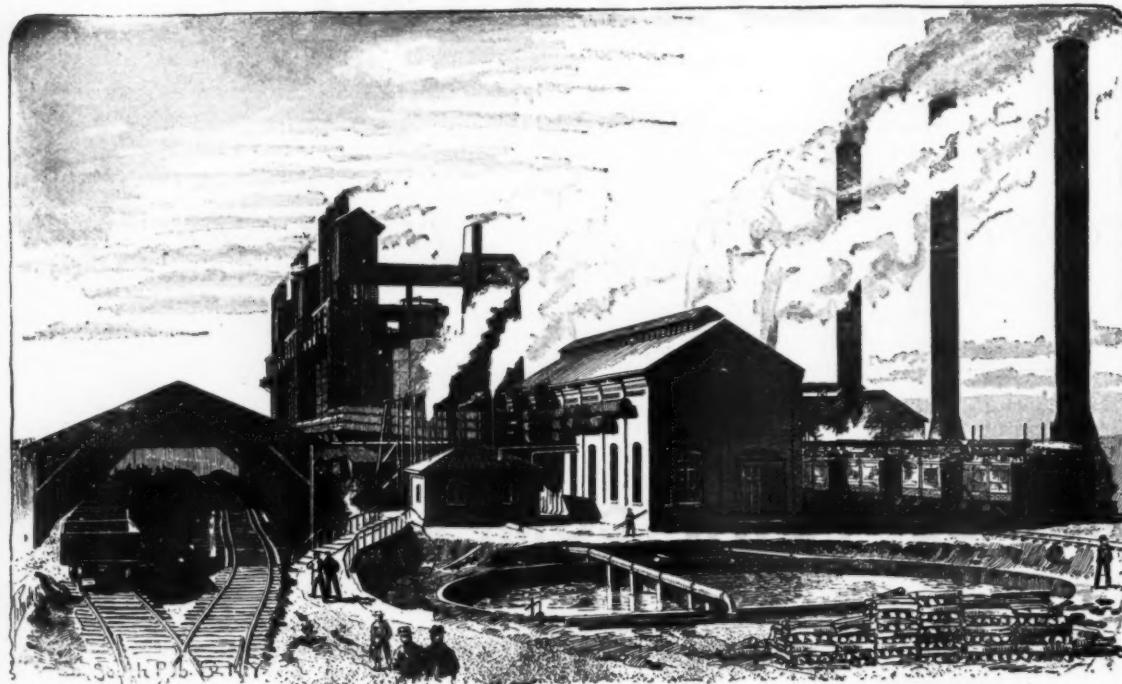
ALL CORRESPONDENCE SHOULD BE ADDRESSED TO

H. I. KIMBALL, Managing Director,

CHATTANOOGA, TENN.

SHEFFIELD, ALA.

THE SUPERB.



The following are among the corporate and private enterprises that belong to Sheffield:

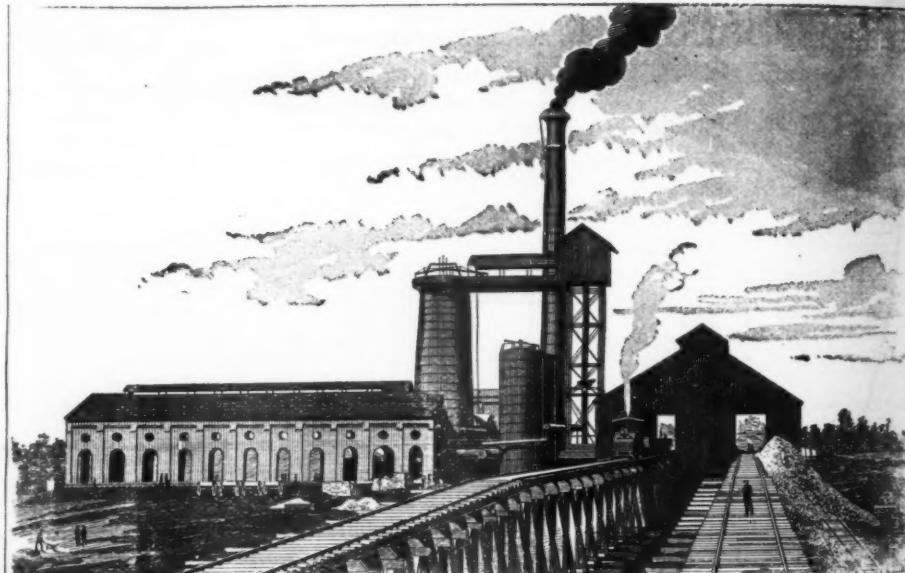
The Sheffield Land, Iron & Coal Co., capital \$1,000,000.
 The Sheffield & Birmingham Coal, Iron & Railroad Co., capital \$1,000,000; the owners of three 150-ton blast furnaces.
 The Birn., Sheffield & Tenn., River Railway Co., capital \$5,000,000.
 The Hattie Ensley Furnace, capital \$200,000.
 The Lady Ensley Furnace Co., capital \$200,000.
 The Electric Light & Gas Fuel Works, \$50,000.
 The Sheffield Ice Co., capital \$25,000.
 The Sheffield Manufacturing & Constructing Co., \$30,000.
 The Sheffield Contracting Co., \$50,000.
 The Eureka Brick & Lumber Co., \$30,000.
 The Howard Brick Co.
 The Sheffield Bakery & Bottling Works.
 The Sheffield Mineral Paint Co., capital \$50,000.
 The Sheffield Agricultural Works, capital \$40,000.
 The Sheffield Cotton Compress Co., \$60,000.
 Millan Brothers, Steam Laundry.
 Enterprise Publishing Co.
 Water Works, already expended, \$30,000.
 Sheffield Street Railway Co., capital \$100,000.
 Cleveland Hotel Co., capital \$50,000.
 Sheffield Hotel Co., capital \$120,000.
 Bank of Commerce, capital \$150,000.
 East Sheffield Land Co., capital \$500,000.
 Hull & Keller's Fern Quarries.
 Mobile Real Estate Co., capital \$50,000.
 Sheffield Real Estate Co., capital \$50,000.
 Sheffield & Mobile Improvement Co., capital \$100,000.
 Sheffield Stove Works.
 Henderson Milling Co., capital \$100,000.
 Globe Iron & Brass Works, capital \$10,000.
 Standard Machine Shop & Foundry, capital \$50,000.
 Owen Pink Mixture Co., capital \$100,000.
 Bell Telephone & Telegraph Co.
 Foulds' Shoe Factory, capital \$20,000.
 Enterprise Wood Working Co., capital \$30,000.
 Buchanan Straw Goods Factory, \$25,000.
 The Sheffield Harness & Saddlery Co., capital \$20,000.
 Principal Shops of the Sheffield & Birmingham Railroad.
 Principal Shops Memphis & Charleston Railroad, now being built.

At the Headwaters of Deep Navigation on the Tennessee River, the Hudson of the South.

The Largest Producer of HIGH-GRADE Pig Iron of any City in the Entire Industrial South.

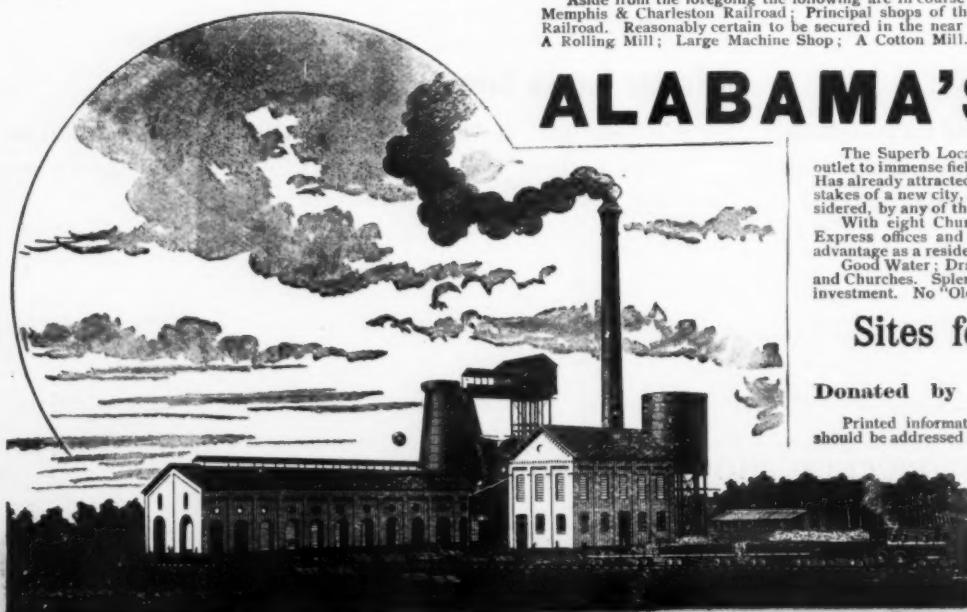
The only point in the South that has can ship pig iron to the cities on the Mississippi, Missouri and Ohio rivers by barge or barge without rehandling. This last shipment of 5,000 tons of Pig Iron to Pittsburgh, Pa., by barge was made at a saving of \$2.65 per ton over what any iron-producing city of the South has done or can do to-day.

Five Large Blast Furnaces
 Capacity 750 tons pig iron per day.



Aside from the foregoing the following are in course of construction and may be considered positive: Principal Shops of the Memphis & Charleston Railroad; Principal shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad. Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill; Large Machine Shop; A Cotton Mill.

ALABAMA'S IRON CITY.



The Superb Location at the head of navigation on the Tennessee River, commanding the outlet to immense fields of IRON ORE and COAL and magnificent tracts of the finest Timber. Has already attracted to the spot where three years ago in a cotton field her projectors set the stakes of a new city, capital and people, unequalled in amount and number, circumstances considered, by any of the so-called new cities of the South.

With eight Church Organizations, two Free Public Schools, Postoffice, Telegraph and Express offices and abundant facilities of transportation by river and rail. It has every advantage as a residence city that can be desired.

Good Water; Drainage Excellent; Health and Climate Unsurpassed. Free Public Schools and Churches. Splendid opening for men of push and energy. No better point for productive investment. No "Old Fogey" element here.

Sites for Manufacturing Enterprises

And for Free Public Schools and Churches

Donated by the Sheffield Land, Iron & Coal Company

Printed information furnished on request. Correspondence solicited. Correspondence should be addressed

W. L. CHAMBERS,

Vice-President and Manager

Sheffield Land, Iron & Coal Company,
 SHEFFIELD, ALABAMA

Population 2,500.

Bank, Schools, Churches, Hotel, Water Works, Splendid Residences, Excellent Society.

Old name of town, and present name of the Postoffice, is Jacksonville, the County Seat of Calhoun, one of the Richest Mineral and Agricultural Counties in the State.

MANY LARGE INDUSTRIES SOON TO BE LOCATED.

TREDEGAR

STEEL WORKS will include three Furnaces, Rolling Mills, &c., to produce 300 tons of Steel daily, covering every line of manufacture from the ore to the finished Steel. The entire plant, including furnaces, buildings machinery, &c., is under contract. Will employ 3,100 hands.

For particulars address GOLDSMITH B WEST, General Manager JACKSONVILLE MINING & MANUFACTURING COMPANY, Tredegar (Present Postoffice, Jacksonville), Alabama.

Alabama.

FOR SUCH INDUSTRIES AS

COTTON MILLS,
WOOLEN MILLS,
TANNERIES,
BOOT AND SHOE FACTORIES,
HARNESS AND SADDLE FACTORIES,
FURNITURE FACTORIES,
CARRIAGE AND WAGON FACTORIES,
FLOUR MILLS,
GRIST MILLS,
CRACKER FACTORIES,
CANNING FACTORIES,
COTTON-SEED OIL MILLS,

DALLAS, TEX.

Is equal to any locality
in America in its
combined advantages of
**CHEAP AND
ABUNDANT
RAW MATERIAL
READY,**
**PROFITABLE
AND EXPANDING
MARKET.**
DISTRIBUTING FACILITIES,
ELIGIBLE SITES,
GOOD CLIMATE.

Any worthy industries
will be aided liberally by the

DALLAS MANUFACTURERS' AID & IMPROVEMENT CO.

711 Main Street, Dallas, Texas.

THE PLACE FOR FACTORIES.

THE ROAHE IRON CO.

WILL BUILD UP A

* **LARGE MANUFACTURING CITY** *

AT

ROCKWOOD, TENN.

AND IS PREPARED TO OFFER SUBSTANTIAL INDUCEMENTS TO MANUFACTURERS.

— AS TO RESPONSIBILITY OF THIS COMPANY, PARTIES ARE REFERRED TO EITHER DUNN OR BRADSTREET. —

FOR PARTICULARS ADDRESS

ROANE IRON CO., Rockwood, Tenn

LURAY, Virginia.

2,500 Acres Town Lands,

8,000 Acres Mineral Lands,

Luray Inn and Caverns.

The Valley Land & Improvement Company,

Capital Stock, \$2,000,000.

Luray, Page County, Va.

DIRECTORS.

D. F. KAGEY, Luray, Va., President.	G. C. MARSHALL, Uniontown, Pa., Vice-President and General Manager.
T. E. McCORKLE, Lexington, Va.	DR. W. L. HUDSON, Luray, Va.
DR. A. M. HENKEL, Staunton, Va.	J. W. MILLER, Mount Jackson, Va.
G. K. MULLIN, Philadelphia, Pa.	

EXECUTIVE COMMITTEE.

D. F. KAGEY,	G. C. MARSHALL,	T. E. McCORKLE,	G. K. MULLIN.
Secretary, T. E. McCORKLE.	Treasurer, H. M. KERR, Kagey & Co.'s Bank.		Attorney, T. E. McCORKLE.
Associate Counsel, H. J. SMOOT.		Manager of Inn and Caverns, G. K. MULLIN.	
Bankers, D. F. KAGEY & CO., Luray, Va.			

CHARTER, PROPERTIES, &c.

The Valley Land & Improvement Company has been organized under the most liberal charter ever granted by the State of Virginia.

2,500 acres for manufacturing purposes and building sites. These lands are in and around the hotel, caverns and town of Luray on an undulating plateau, protected on either side by the Massanutton Mountain and the Blue Ridge Mountains.

8,000 acres of the best mineral properties in Virginia, consisting of iron, manganese and other valuable minerals which have stood the test of examination by the ablest geologists of the country.

The company owns the celebrated Luray Inn and the Luray Caverns.

Page County stands at the head of the list as having a greater variety of minerals and richer than any other county so far as known in the State.

In addition we have the finest kind and a great variety of virgin timber and fire-clays, slates, beautiful marbles, ochres, umber and mineral paints.

LOCATION, RAILROADS, &c.

Luray, now a town of about 2,500, is the county seat of Page county, has five churches, splendid schools, fine stores, three newspapers, flouring mill, cigar factory, &c.

The town is on the Shenandoah Valley Railroad, of the Norfolk & Western system, and is the best location in Virginia, four hours from tidewater.

Two new lines projected connecting closely with Baltimore and Washington and bearing cheap freights.

Luray has largest tannery in the world, annual pay roll over \$350,000.

Inexhaustible water supply, agricultural resources, charming climate.

Fine natural sites for furnaces and manufactories of all kinds fronting the railroad, reserved by the company, which by donations of land and in every possible way will promote Luray's manufacturing interests.

LOTS, CAPITAL STOCK, &c.

Capital stock \$2,000,000, shares \$100.

One million of stock reserved in treasury for betterment.

One million now offered for sale.

Books open at the bank of D. F. Kagey & Co., Luray, Va.

The company reserves the right to close the books any time before the full amount of the one million is sold.

Twenty per cent. must be paid on subscription, so per cent in 30 days, the balance equally in six and twelve months.

When half of the subscription is paid in subscribers have the right to use their stock in payment on lot purchases.

The company feels safe in saying that with the magnificent property in hand, the Inn and Caverns, it will be enabled when thoroughly under way to pay four or five per cent. dividend on the stock sold, independent of lots and mineral lands.

The company already owns an electric plant which will be considerably enlarged.

Complete system of water works and many other improvements projected. Investors are referred to Mr. J. W. Wheeler, Cashier Drovers and Mechanics' National Bank, Baltimore, Md., for full information. H. C. Turnbull, Jr., real estate agent, 52 Lexington street, will receive subscriptions of stock in Baltimore.

The fullest investigation invited.

THE VALLEY LAND & IMPROVEMENT COMPANY, LURAY, PAGE COUNTY, VA.

DENISON, TEXAS.

The Queen City of the Southwest

GATEWAY TO THE GREAT STATE OF TEXAS.

The City of Denison Presents the Finest Opportunity of any City in the Southwest for the Investment of Capital in Large or Small Sums

DENISON is situated in Northeastern Texas near inexhaustible beds of Coal and Iron, surrounded by the finest Fruit Lands in the world, and adjoining the INDIAN TERRITORY, which, in the nature of things, must in a few years be opened to settlement.

The city is regularly and beautifully laid out. Railroads run from it in four different directions. The Missouri, Kansas & Texas alone does an enormous business, having 54 miles of switch track in Denison, employing 500 skilled workmen and disbursing \$150,000 a month in wages.

The Houston & Texas Central Railway has its northern terminus here. The Choctaw Coal & Railway Co. have recently completed a survey of a line from Hartshorn, I. T. (a junction point with the main line of their road) to this city. The Denison, Sherman & Dallas Railway is now being constructed from here to Sherman, and four other roads have located lines to this point, with very good prospects of building.

The first public school in the State was established here, and the city's elegant two and three-story brick school buildings, surrounded by attractive grounds, are well arranged for the use of the white and colored children. Its schools are in session ten months in each year. We have sixteen church societies, seven of which are colored.

The city is well supplied with pure water from its numerous private wells—dug in the ground—and its first-class system of water works. Rate of taxation low.

The city has six miles of street railway, and a seven-mile motor railway; has an electric-light and gas company and a telephone plant. It has an influential New England colony, and counts among its citizens people from every State in the Union.

The erection of a large hotel to cost \$125,000, and a steel plant with \$2,000,000 capital is contemplated.

The population of the city by census of 1890 shows a gain of 170 per cent. in ten years.

35,000 bales of cotton were shipped from Denison in 1890, and many carloads of fruit and early vegetables are shipped annually.

The Denison Canning Co., capitalized at \$100,000, has one of the largest canning factories in the country.

The Denison Cotton Manufacturing Co.'s 25,000-spindle mill, to cost \$500,000 and to employ 650 hands, will be completed by January 1st, 1891.

The climate of Denison is magnificent, situated nearly 800 feet above sea level. In summer it is warm, but far cooler than many cities farther North, and from 6 P. M. until after sunrise it is always cool. The city is very healthy.

The capacity of the ice factory is now increased from a daily output of 30 to 50 tons.

The Denison Land & Investment Co. is prepared to give every reasonable encouragement to manufacturers, and solicit correspondence from such manufacturers as contemplate coming into the Southwest to locate.

Address all communications to

THE DENISON LAND & INVESTMENT CO.

Paid-Up Capital, \$1,200,000.

DENISON, TEXAS.

OFFICERS.

W. P. RICE, President.

MILTON H. FRENCH, Vice-President.

B. J. DERBY, General Manager.

ARTHUR L. BERRY, Secretary and Treasurer.

DIRECTORS.

W. P. RICE, Kansas City, Mo.

J. M. FORD, Kansas City, Mo.

SAM STAR, Denison, Tex.

MILTON H. FRENCH, Thomaston, Me.

JOS. B. LINCOLN, Boston, Mass.

B. J. DERBY, Burlington, Vt.

ARTHUR L. BERRY, Denison, Tex.

M. V. B. CHASE, Augusta, Me.

B. C. MURRAY, Denison, Tex.

Write to the

C
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F

*The
Richest.*

*Best
Managed.*

CARDIFF

*Greatest
Resources.*

*Unequalled
Opportunities.*

* * * * * Coal & Iron Co.

CARDIFF, ROANE CO., TENN.

SAVERNAKE,

Rockbridge County, VIRGINIA.

—* The Latest and Most Attractive Addition to Buena Vista. *

The Phenomenal Success of which New Industrial City has made Necessary Future Extensions on the same line of Valuable Minerals,

WITH UNRIVALLED FACILITIES FOR TRANSPORTATION.

SAVERNAKE adjoins Buena Vista on the southwest; fronts on Shenandoah Valley Railroad and on James River Division of the Chesapeake & Ohio Railway.

High Grade Manganese and Iron Ores to Steel and Iron Trades.

* **SAFETY AND PROFIT TO INVESTORS.** *

Healthy and Picturesque HOMES at Moderate Prices to Lot Buyers.

The Advantages of an Established City, with Churches, Schools and Factories adjoining. Employment for Mechanics and Laborers. Active Trade to the Storekeeper. Consuming Industries, with a Ready Market for product to the Manufacturer. Avenues connecting with those of Buena Vista, to Insure Convenient Access, through Street Car Lines, already Projected from that City.

SAVERNAKE

Is laid out in conveniently-sized lots to suit all in Prices and Location.

RESIDENCE LOTS. BUSINESS LOTS. MANUFACTURING SITES.

THE INDUSTRIES already secured, and which will be further announced weekly in the MANUFACTURERS' RECORD, guarantee rapid profits, free from speculative features, to all purchasers.

The LOCH LAIRD ESTATE & MINERAL CO., Limited,
LONDON, ENGLAND,

Of whose property Savernake forms a portion, having already sold a considerable number of lots to investors in London, and being in negotiation with both English and American capitalists for further sales, offer lots in Savernake to the American public, confident that their location will render values at once apparent, and guarantee every effort to sustain and foster this enterprise, both in the United States and England. Maps of Savernake and all particulars of information may be obtained upon application to

Loch Laird Estate & Mineral Co., Limited,

THOMAS DUNLAP, MANAGING DIRECTOR.

Postoffice Address—Triford, Rockbridge Co., Va.

SAVERNAKE, VIRGINIA.

Railroad Station for both Shenandoah Valley Railroad and Chesapeake & Ohio Railway, Loch Laird Station, Va.

The Goshen Land & Improvement Company

OF GOSHEN, VIRGINIA.

Goshen, the Gateway connecting the Virginias.

The Coming Railroad Center.

Goshen fulfilling prophecy in becoming the Great Iron Manufacturing Center.

Surrounded by the wonderful Mineral Springs Belt, where thousands from all over the land congregate during the Summer. Great Industries located here;

More to follow

Car Works, to manufacture Passenger, Freight and Electric Cars, are now being built.

Works covering 15 acres of ground.

Large Rolling Mill under construction.

Keystone Machine Company's building nearly completed.

Woodcock Iron Works building now under construction.

The Palace Hotel, the finest building in Virginia, under contract to be completed

July 1st, 1891.

Industries already secured and under construction guarantees the success of Goshen as a Manufacturing Center.

LAWRENCEBURG, TENN.

The Coming Residence and Industrial City of the Great Western Mineral Belt of Tennessee.

THE LAWRENCEBURG LAND & MINERAL CO.

Capital - - - \$1,300,000.

E. F. CRAGIN, PRESIDENT.
CHICAGO, ILL.

V. S. PEASE, SECRETARY.
NASHVILLE, TENN.

F. H. FOSTER, ASST. SECRETARY.
CHICAGO, ILL.

OFFICES: Room 63, 185 Dearborn Street, Chicago, Ill., and Lawrenceburg, Tenn.

MANUFACTURING.

WANTED.—Furniture Factories, Sash, Door and Blind Works, Brick and Terra Cotta Works, Tanneries, Carriage Works, Barrel Factories, Spoke and Bending Works, Chair Factories, Cart Factories, Woolen Mills, Cotton Mills, Foundries, Machine Shops and other Small Industries.

It will be the policy of this Company to secure a large number of small industries, diversified in character, so that the shutting down of one plant will not paralyze the whole town.

CHEAP WOOD and IRON

are our strong cards.

HEALTH.

In another portion of the city, back from smoke and noise is *Lawrenceburg Heights*, the *Healthiest Place in America*. A rival to Asheville, N. C., in healthfulness and delightful climate, both in winter and summer.

An ideal all-the-year resort, laid off in beautiful drives, parks, an artificial lake, well watered by *pure freestone springs*.

The water a sure cure for kidney disease and other like complaints.

The air and climate a cure for consumption and throat diseases.

Hotels will soon be built in the Heights. Lots will be sold there with building limit.

Beautiful scenery, fishing, boating and hunting

FOR PROSPECTUS AND BY-LAWS ADDRESS

Lawrenceburg Land & Mineral Company,

Or at Lawrenceburg, Tenn.

Room 63, 185 Dearborn Street, Chicago, Ill.

STOCK IN THE CEDAR GROVE INDUSTRIAL CO.

Is a SAFE INVESTMENT for Money Set Free by January Disbursements.

CEDAR GROVE IS A TOLL-GATE

On a GREAT THOROUGHFARE, Through which many Millions of Dollars' Worth of the FINEST COAL IN WEST VIRGINIA Must Pass in order to get to market.

ALL THE CONDITIONS NECESSARY

To the Building of a SOLID TOWN, based on Diversified Industries, are present at CEDAR GROVE.

THE CEDAR GROVE INDUSTRIAL COMPANY

Is a COMPANY FOR THE STOCKHOLDER. It will be MANAGED TO DEVELOP the Company's Assets and to make the Stock worth putting away in the Safe-box as a PERMANENT DIVIDEND-PAYING INVESTMENT.

R. A. WOOLDRIDGE,

PRESIDENT.

Principal Office, 212 Buchanan's Wharf, Baltimore, Md.

The Middlesborough Town Company,

ALEX. A. ARTHUR, President.

JOHN B. CARY, Sec. and Treas.

Fourteen months ago the population of the present site of Middlesborough, Ky., did not exceed 50; to-day the town has a population exceeding 6,000. It is a conservative estimate to say that in three years 50,000 people will be living here. The amount of capital now invested in the development of Middlesborough reaches

\$26,500,000.

The history of the world does not show an instance of such amazing development in so short a time and on so sure and solid and permanent a foundation.

The developments here are in the hands of English capitalists, whose purpose it is to create around, Cumberland Gap the greatest coal and iron development the world has ever known.

Statement of Development to September 1, 1890.

	Number.	Value.
Business houses erected and occupied.....	83	\$ 285,000
Business houses being erected.....	41	441,500
Business houses contracted for, to be completed by Jan. 1, 1891.	31	176,500
Residences erected and occupied.....	280	417,250
Residences being erected.....	97	228,450
Residences contracted for, to be completed by January 1, 1891.	72	161,450
Industrial plants in operation.....	16	289,500
Industrial plants building.....	27	2,872,500
Industrial plants contracted for.....	14	750,000
Hotels built and occupied.....	7	132,000
Hotels being erected (including Harrogate and Cumberland Gap).....	6	850,000
Hotels contracted for.....	3	45,000
Churches completed.....	5	22,500
Churches being erected.....	3	18,000

PUBLIC BUILDINGS.

Schoolhouse.....	3,500
Public library and exhibition hall.....	25,000
City hall.....	10,000

The above statement includes only cost of construction, and does not include working capital or value of properties or stock.

BANKS.

	Capital.	Deposits.
Coal & Iron Bank.....	\$1,000,000	\$139,000
First National Bank (to be increased to \$100,000).....	50,000	76,000
People's Bank.....	500,000	120,000
Bank of Middlesborough (to be increased to \$100,000)....	50,000	60,000
Bank of Cumberland Gap.....	50,000	17,000
Bank of Claiborne	25,000	10,000
Total.....	\$1,675,000	\$797,000

POPULATION.

The population of Middlesborough was fifty souls in May, 1889. In August, 1890, about 6,200. Including the plants that are now completed and those that are in course of construction, which, by contract, are to be completed inside of fifteen months, Middlesborough will have a working population, composed of skilled and unskilled labor, of 7,688 men, which, according to all acknowledged rules, will give the city in eighteen months nearly 40,000 inhabitants.

NOTE.

Two years ago the nearest railroad was at Corbin, on the Louisville & Nashville System. To-day there are in Middlesborough the Louisville & Nashville, the Knoxville, Cumberland Gap & Louisville Railroads, the Belt Line and, by traffic arrangements, the Norfolk & Western and the East Tennessee, Virginia & Georgia Roads, with others building.

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The Famous Shenandoah Valley of Virginia.

Shendun now has a first-class hotel and a street car line, and many buildings are now in process of construction, and several important industries are being provided for.

Those desiring further information are invited to visit the place, or to a correspondence.

Jed Hotchkiss, President,

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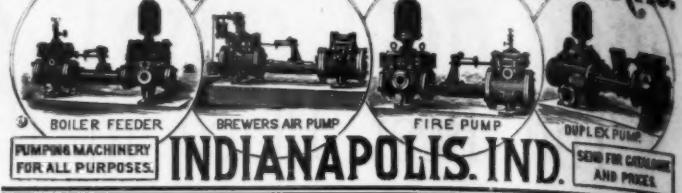
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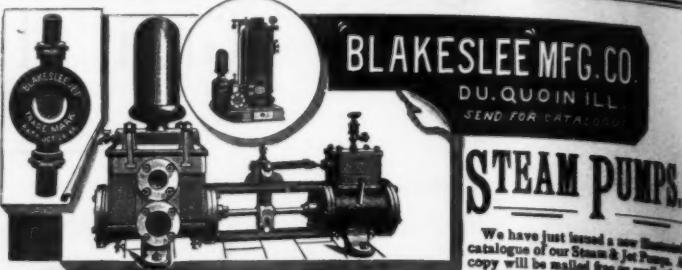
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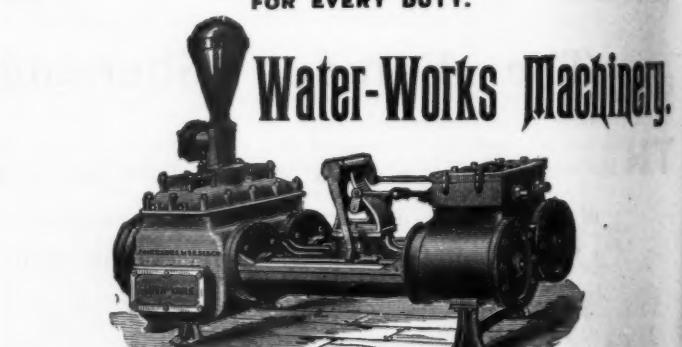
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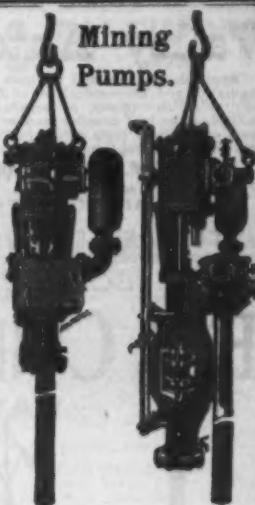
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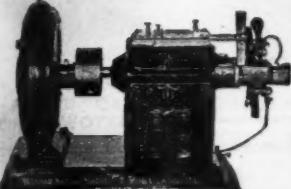
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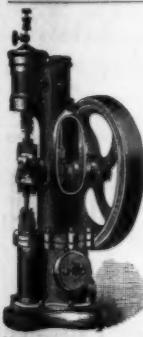
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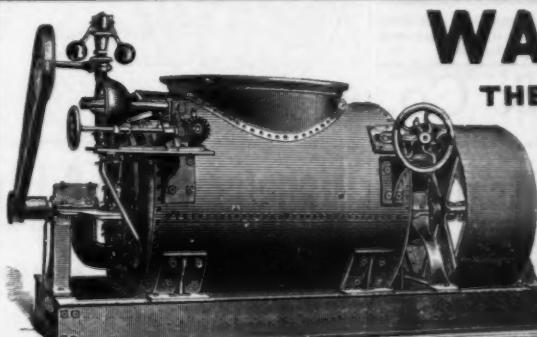


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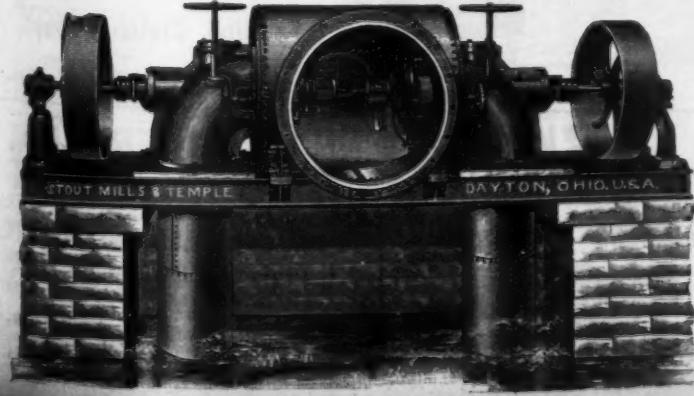
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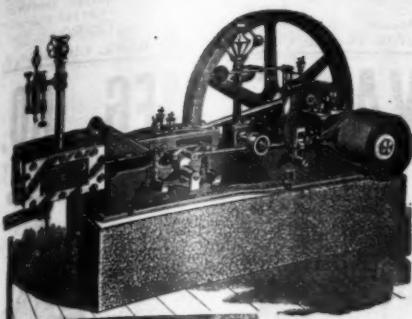
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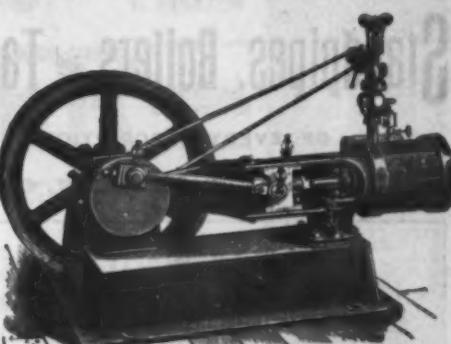
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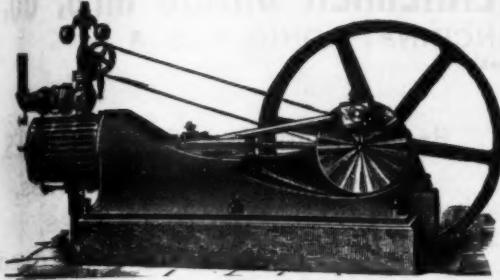
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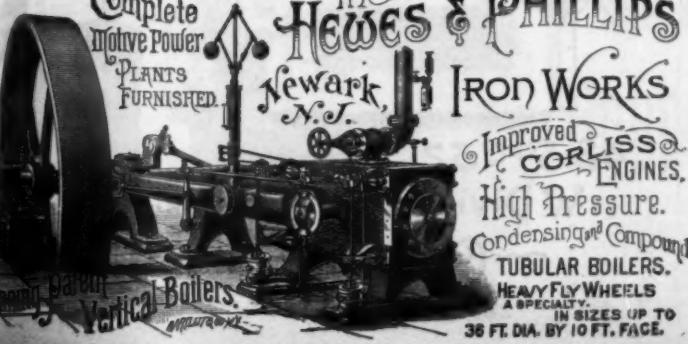
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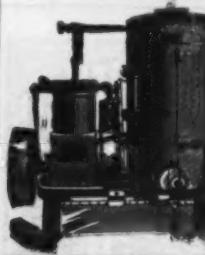
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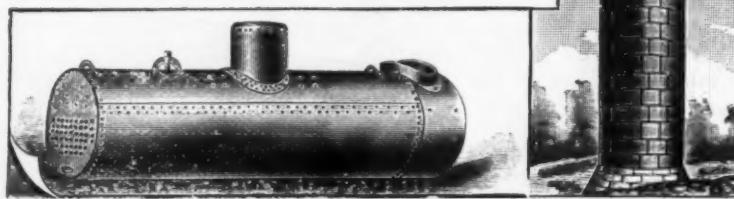
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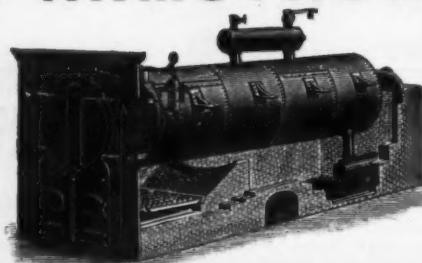
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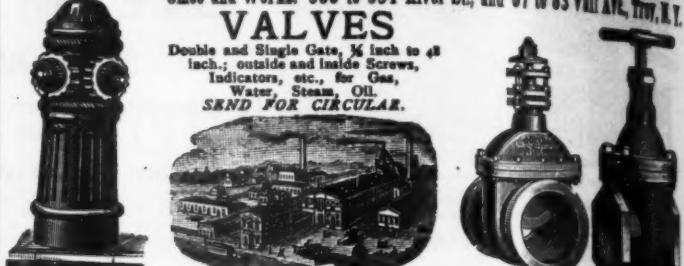
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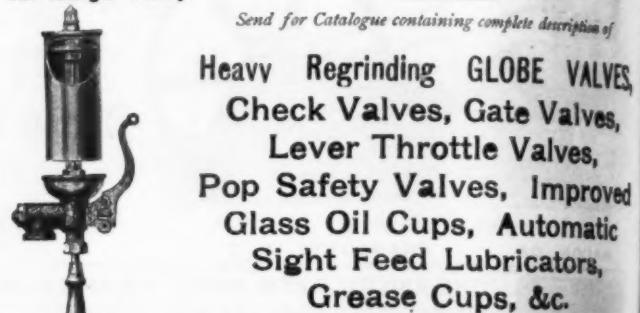
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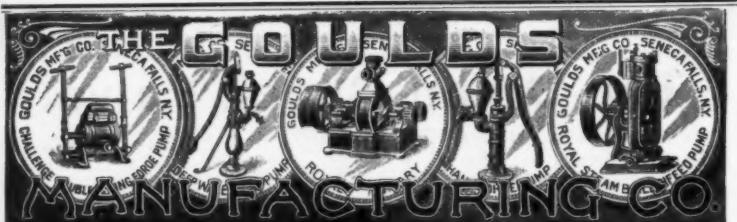


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CHICAGO, ILL.

Railroad Construction

Atlanta, Ga.—Railroad.—A bill has been introduced in the legislature chartering the Etowah Railroad Co.

Blackville, S. C.—Railroad.—Moore & Springs, of Columbia, lately referred to, write that they have contract for grading the South Bound Railroad from Graham, near Blackville, to Columbia, a distance of about 47 miles; also contract for 8 miles on same road at Campbellton.

Bowling Green, Ky.—Railroad.—Survey is to commence December 25 on the projected Chicago, Henderson, Bowling Green & Chattanooga Railroad, previously referred to. J. E. Williamson, Evansville, Ind., can give particulars.

Charleston, S. C.—Railroad.—The Charleston, Batawburg & Western Railroad Co. has applied to the legislature for a charter.

Fort Worth, Texas—Electrical Railroad—John C. Ryan has, it is stated, arranged for the building of an electrical railroad to Prospect Heights

Gulf, N. C.—Railroad.—George F. Edmiston and R. F. Rankin, of Philadelphia, Pa., have, it is stated, submitted a proposition to property owners along the route to build a railroad from Gulf to some point on Deep river near Glenn's Mills, in Moore county.

Harrisonburg, Va.—Railroad.—The Fredericksburg & Valley Railroad Co., mentioned last week (under Fredericksburg) as to build a railroad from Fredericksburg to Harrisonburg, expects to begin work at the Harrisonburg end in 90 days.

Houston, Texas—Railroad.—S. Taliaferro and others are endeavoring to organize a company to build a railroad from Houston to the mouth of the Brazos river. The distance is estimated at from 55 to 55 miles.

Jackson City, Tenn.—Electrical Railroad.—The Jackson City & Carnegie Street Railway Co. is building the electrical railroad lately referred to.

Knoxville, Tenn.—Dummy Line.—The City & Suburban Railway Co. has been chartered by J. C. Harrington, Samuel Dawes and others and applied to the city council for a franchise to build a dummy line.

Macon, Ga.—Railroad.—A bill has been introduced in the legislature chartering the Macon & Indian Springs Railroad Co.

Milner, Ark.—Railroad.—The building of a railroad from Milner to Homer, La., is proposed

Mobile, Ala.—Railroad.—M. B. Bond, J. H. McWhorter, James K. Glennon and others have applied for a charter for the Mobile & Mississippi Railway Construction Co.

Ocala, Fla.—Railroad.—The Ocala & Silver Springs Transfer Co. has been chartered to build a railroad from Ocala to Silver Springs, 6 miles. The capital stock is \$50,000.

Raleigh, N. C.—Electrical Railroad.—The Edison Electric Co. has been awarded contract for converting the Raleigh Street Railway, lately mentioned, to the electric system.

Richmond, Ky.—Railroad.—The Richmond, Nicholasville, Irvine & Beattyville Railroad Co. (office, Nicholasville) has arranged with the Southwestern Construction Co. for the completion of its line from Richmond to Irvine, work to be resumed at once. The distance between the two cities is about 60 miles, of which 30 miles are constructed. The road is to be built from Irvine to Beattyville in the spring.

Ridgeway, N. C.—Railroad.—At a recent meeting of stockholders of the Raleigh & Gaston Railroad Co. (office, Raleigh) the board of directors were authorized to take action that it is believed insures the immediate building of a road from Ridgeway to Richmond.

Savannah, Ga.—Railroad.—A bill has been introduced in the legislature incorporating the Savannah & Isle of Hope Railway Co.

Tullahoma, Tenn.—Railroad.—The Tullahoma, Elk River & Huntsville Railroad Co. has been incorporated by H. Jacobs, M. V. Staley, G. A. Hawkins and others to build a railroad from Tullahoma to Huntsville, Ala.

Waco, Texas—Electrical Railroad.—The Boston-Waco Land Co. will probably build an electrical railroad from Waco to its new town of Mount Lynn, a distance of 2½ miles.

Washington, D. C.—Railroad Bridge.—A bill has been introduced in Congress authorizing the Arlington & Mount Vernon Railroad Co. to construct a bridge across the Potomac for its electrical railroad, previously referred to.

PRESIDENT KIMBALL, of the Norfolk & Western, announces the following appointments: Joseph H. Sands, vice-president and general manager; David W. Flickwir, general superintendent Eastern Division, Roanoke, Va.; A. C. Hippey, general superintendent Western Division; O. Howard Royer, assistant general freight agent; E. T. Burnett, assistant purchasing agent; G. R. W. Arms, assistant treasurer, Philadelphia, Pa.; Walter Macdowell, assistant auditor, Roanoke, Va.

General Manager Jones.

The receiver of the "Three Cs" Railroad, recently appointed by the United States Circuit Court, Mr. Samuel Lord, of Charleston, S. C., has done wisely in making Major John F. Jones, of Blacksburg, general manager of that system, which, so far as completed, consists of 180 miles between Camden, S. C., and Marion, N. C., 30 miles in Tennessee and 8½ in Kentucky. There is a great deal of work in various conditions of forwardness, and a vast amount of material that must be cared for. Major Jones is pre-eminently the man for general manager of these fragments of a well-planned system that will ultimately be finished, for he has had an experience that exactly fits him for the arduous work before him. Major Jones first gained recognition among railroad men by the executive ability displayed when he was general freight agent of the Connecticut Western Road, of which he was afterwards the general superintendent. Later, as agent of the trustee of that railroad, he had control of it during bankruptcy proceedings, which he carried through successfully, and then assisted in the reorganization, resulting in the incorporation of the Hartford & Western Railroad. As vice president and general manager of that company, he built the road through to a connection with the New York Central & Hudson River Railroad, and put it on a dividend-paying basis.

Major Jones left Connecticut several years since to superintend the construction of the "Three Cs" Railroad in North and South Carolina. He built that part of the line between Rutherfordton and Blacksburg, which all railroad experts who have examined it say is the best built and at the least cost of any line of equal length in the South. Since then, until financial troubles compelled the appointment of a receiver, Major Jones has been both superintendent and traffic manager, with headquarters at Blacksburg. All interested in the "Three Cs" Railroad, whether as creditors or bond owners or stockholders, have good reason for thankfulness over this judicious appointment.

THE New England edition of the Northwestern Lumberman for December appears in a new and beautifully designed cover in celebration of its 18 years of successful and useful work. During that time the Lumberman "has recorded the evolution of the saw mill from the mulay to the band—the cant hook to the steam nigger;" it has "traced the timber-seeker's search after stumpage" from the great lakes to the Pacific slope, and has followed the Western pioneers into the forests of the South, and has helped to introduce their products into Western and Northern markets. It is a credit to W. B. Jordan, its proprietor, and to Chicago, the place of publication.

HAVE you real estate notes, municipal or county bonds that you want to convert into cash? If it is a Southern note or bond you can advertise it free, four times, in the MANUFACTURERS' RECORD.

THE COMMERCE OF THE WORLD.

(Written for MANUFACTURERS' RECORD.)

The situation of Great Britain was graphically described by Captain Fitzgerald, of the Royal Navy, in an address before the London Chamber of Commerce in 1888, in which he said: "It has come to pass that this country finds itself in the unprecedented condition of a huge citadel containing a garrison of thirty-seven millions and surrounded by a wet ditch, and it must be evident to all men that one of the primary conditions of the existence of this garrison is that it should hold absolute and undisputed command of this ditch. If they lose it, it is evident that they can be starved into submission without their enemy going to the trouble of invading them." The obvious meaning of this simile is that Great Britain obtains most of the food for her millions of population from other countries, and that if her navy should be destroyed her coasts could be blockaded, all food supplies could be kept out, and starvation would speedily lead to submission. A numerous and powerful navy, able to cope with and to overcome the combined fleets of the continental powers, is a perpetual necessity that will never be removed until "nations shall know war no more." Not only must her floating coast defences be impregnable, but Great Britain must have many fleets of cruisers for the protection of her commerce, whose realm is world-wide, for her merchant vessels visit all ports and traverse all seas. This, as detailed in the Year Book of Commerce for 1889, amounts to 753 million pounds sterling, an increase of imports and exports over 1888 of more than 60 million pounds sterling, or an increase of more than £1 per head for the entire British population. Most of this commerce is now done in steamships. The tonnage of the world is about 11,000,000, of which Great Britain owns some 7,000,000, or more than that of any three nations combined. Her steamers engaged in commerce number 5,715, while France has but 418, and Russia only 227. In case of a war with any of the continental powers it would be necessary for Great Britain to maintain a large naval coast guard and to send her cruisers everywhere as a sea patrol for the protection of her merchant marine. The one would keep her ports open and prevent the landing of armies of invasion; the other would guard her merchantmen from capture by the enemy.

These and many other cognate suggestions are embodied in an address on the "Protection of Commerce," delivered by Rear Admiral Richard Charles Mayne, C. B., M. P., before a special general meeting of the members of the London Chamber of Commerce, held on the 29th of last month, to which many of England's most eminent merchants and statesmen listened with profound attention. This speech is printed in full in the Chamber of Commerce Journal of December 5th, and is brimming with facts and suggestions of great significance at this time, when our government is building a navy worthy of the name, and our Congress is discussing the expediency of subsidizing ships to engage in foreign trade which shall be so built that they can be auxiliary to the navy in case of war.

"Commerce," said the Rear Admiral, "is the very life-blood of this country. It must never be lost sight of that, cut-off from her food supply, Great Britain dies; and yet our food supply, all important as it is, is by no means all that is included in the question of the protection of our commerce, the ramifications of which reach not only every part of our own empire, but every part of the earth. For it must be remembered that it is not the people of England alone who are maintained by our commerce. Commerce is the life-blood of mankind, and while it is true that by far the greater part of it may be said to pass

through English arteries, the serious interruption of its steady and healthful flow would cause disease in the whole civilized world."

The Admiral makes the point, and sustains it by quotations from eminent authorities, that a nation's sea-power and its commerce are interdependent, and says: "Boastful though it may seem to foreigners, every true Englishman should resolve that he will at all cost maintain that control of the sea, the obtaining and preserving of which have made this nation what it is, and the loss of which has brought decadence, if not ruin, upon every country that has suffered it." In support of this proposition he quotes from the work of Captain Mahan, U. S. N., "The Influence of Sea-Power Upon History," in which is shown "how country after country, from one cause or another, lost its sea-power, and how this power must be based upon peaceful and extended commerce, and therefore that aptitude for commercial pursuit must be a distinguishing feature of the nation that attains it." He cites also a statement made by De Witt, one of Holland's most eminent statesmen, who, writing of the decadence of Holland, "whose sea-power grew with her commerce and died with it," said: "The character of the Dutch is such that unless danger stares them in the face they are indisposed to lay out money for their own defence. I have to deal with a people who, liberal to profusion when they ought to economize, are often penurious to avarice when they ought to spend." Change the word Dutch to American and this would be an absolutely truthful portrayal of the character of a great number of our own people.

The Admiral evidently knows more about the laws of his country than does the British minister to this country, who last winter wrote to the English consul in Charleston that he was not aware that Great Britain paid any subsidies to her merchantmen, for the Admiral said to the members of the London Chamber of Commerce: "I thoroughly approve of the subsidizing of the merchant steamers by the Admiralty, in order to keep them in our own hands and prevent their being bought by an intending enemy, as well as to make a connecting link between the navy and the mercantile marine." And in the same connection he quotes from a statement made by Lord C. Paget, published last August in the United Service Magazine, which said: "The vast amount of grain now brought to this country by the Atlantic liners would continue to be brought without risk to the taxpayer." Commenting upon which that magazine said: "At least 50 of these vessels are subsidized."

All the facts presented by the Rear Admiral, and all the arguments founded upon them, apply with even greater force to the United States, for we can only hope to regain our foreign commerce and to increase the same by pursuing the same course by which Great Britain acquired and by which she still maintains pre-eminence in commerce throughout the world. Of our own coasting trade we still are masters, thanks to our protective navigation laws. We must now enter into competition with other maritime nations for a fair share of the commerce of the world. Will Congress give us the opportunity?

THE Galveston Live Oak Club, composed of the business men of that stirring Texas city, has invited Secretary Blaine to accept its hospitalities next February. The letter of invitation contains the following paragraph: "The close relations existing between the importers of Galveston and the business men of Mexico and South and Central America give our people an insight into the practical workings of reciprocity. The citizens of Maine can extend to you no more cordial welcome than the people of Texas, and we ask for the opportunity of proving the truth of this statement."

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as a Remedy for Con-
traction.**

The wealth of an individual is the net value of what he possesses if he is free from debt, but if he owns property of a nominal value a thousand times greater than what he owes, and when pressed for payment he cannot raise money to meet his obligations, he practically becomes insolvent. His possessions will not save his credit, notwithstanding their intrinsic value.

This country has enormous and well distributed wealth, but at least 90 per cent. of it is in assets that cannot be converted into spot cash in an emergency. This wealth increases in geometrical progression, while the supply of gold and silver and of paper currency used to settle the balances between buyers and sellers gains volume very slowly. The vast aggregate of transactions caused by the increasing wealth of our people are settled in something that represents money, but not with actual cash. There is not enough of the last in existence in this country to pay the daily balances of trade. In its place there is credit and public confidence, based upon the intrinsic wealth that it represents by lands and buildings, by stores and factories, by farms and live stock, by raw materials and finished goods, by railroads and their equipments, by forests and mines, and by the thousand and one other things that are not money, but that have a recognized value.

The last of a series of four articles written by Mr. Edward Atkinson and published in Bradstreet's is accompanied by a page of illustrations of "the mechanism of distrust" and "the mechanism of confidence." In explanation of these Mr. Atkinson says: "When the government can give no confidence to banks and bankers, but must draw money from circulation or from bank reserves, without power to discriminate, under strict rules of the Sub-Treasury Act; when the people of many sections look upon banks and bankers with suspicion and prejudice regarding their profits, as if they were not earned by services, then it must happen that the exchanges, or purchases and sales of property of all kinds, which amount to not less than \$130,000,000,000 worth a year, 90 per cent. or more on credit, will be exposed to constant danger. At least \$50,000,000,000 worth of these purchases and sales consist of dealings in the actual products of the farm, the forest, the factory, the mine and the workshop, from which sources we derive about \$200 worth each year for each man, woman and child in the nation. Under such conditions a nearly fixed amount of the circulating medium—of which the greater part is lawful money—may become so distributed that the lawful money will be kept out of the bank reserves, or may be drawn out when most needed there. In such event

the whole fabric of credit will be shaken and great disasters may ensue. But when confidence leads to a change in restrictive statutes the same volume of lawful money will serve to fill bank reserves in full measure, the small notes being provided in exact proportion to the requirements by a secured issue of convertible notes, which can be readily adjusted to the wants of trade by the banks which give security to the clearing-houses for their prompt redemption in coin. Then the huge volume of purchases and sales may be conducted with safety, and the vast volume of credit based on active capital will not be disturbed so long as credits are granted with due regard to prudence. No misnamed 'scarcity of money' will then bring on useless panics, because the whole wealth of the country will be bound up in all of its transactions. The pyramid will then stand firmly on its base, and all commerce will be conducted with the mechanism of commerce."

In the accompanying letter Mr. Atkinson discusses the subject with his usual clearness of statement. His position is that there "is not a scarcity of legal money," but that "the amount of legal money—aye, even the amount of gold only—without regard to United States legal tender notes, which is now within the limits of this country, is ample and sufficient as a basis for all the credit that could possibly be required, if it were gathered in the right place, i. e., in bank reserves." That this may be done readily and safely, it is only necessary that Congress should enact a law "authorizing national banks to issue secured notes which may serve as a circulating medium in addition to the bank notes now authorized, which are now secured by the deposit of United States bonds." By this act districts should be defined and established in all parts of the country, in which districts certain designated cities should be held to be the respective banking centers. Banks having a designated aggregate capital within any district should be authorized to unite in a clearing-house association, and in addition to the usual transactions of such an association, they should have power to deposit securities, "satisfactory in amount and quality," and thereupon the officers of the clearing-house should issue certificates in the form of bank notes, of the denomination of \$1 and upwards, which would not be legal tenders, but would serve all the purposes of trade equally well with silver certificates issued by the United States Treasury.

By this plan mercantile paper, loans on bond and mortgage, securities of every kind that had intrinsic value, could be made the basis of a circulating medium that would supply all the demands of trade, be as absolutely safe as are national bank notes to their holders, and be as flexible as the business of the country required. It is seemingly the most feasible plan that has yet been presented for the creation of an elastic currency.

Southern Financial News.

NEW BANKS.

Atlanta, Ga.—Bills have been introduced in the legislature to incorporate the American Loan & Trust Co. and the Singleton Banking Co.

Bristol, Tenn.—A branch of the Farmers' Saving, Building & Loan Association of Nashville has been organized.

Covington, Ga.—A bill has been introduced in the legislature to incorporate the Clark Banking Co., of Covington.

Dallas, Texas.—The establishment of a national bank at Oak Cliff with a capital stock of \$400,000 is probable.

Easley, S. C.—As stated last week, a bank has been organized with W. M. Hagood, president, and W. C. Smith, cashier. The capital stock is \$50,000.

Florence, S. C.—The Bank of the Carolinas has been organized with J. P. Coffin, president. The capital stock is \$20,000.

Fort Worth, Texas.—The New England Savings Bank & Trust Co., of Fort Worth, has been chartered by Samuel Evans, E. B. Daggett, L. B. Imboden and others.

Fort Worth, Texas.—The Farmers & Mechanics' National Bank has increased its capital stock to \$1,000,000.

Greenville, Texas.—A national bank with a capital stock of \$100,000 is to be organized.

Griffin, Ga.—A bill has been introduced in the legislature to incorporate the Bank of Griffin.

Huntington, W. Va.—The Commercial Bank of Huntington, has been chartered by W. T. Thompson, G. N. Riggs, D. E. Abbott and others. The capital stock is \$50,000.

Marble Falls, Texas.—The organization of a national bank is proposed.

Milledgeville, Ga.—J. F. Andrews, of Wichita, Kas., contemplates the establishment of a national bank with a capital stock of \$100,000.

New England, Ga.—A bill has been introduced in the legislature to incorporate the New England City Loan & Banking Co.

Newnan, Ga.—A bill has been introduced in the legislature changing the name of the Colton Mills Bank to the Newnan Banking Co.

Quitman, Ga.—A bill has been introduced in the legislature to incorporate the Merchants & Farmers' Bank of Quitman.

Savannah, Ga.—The National Bank of Savannah will, it is stated, increase its capital stock from \$250,000 to \$500,000.

West Point, Va.—A bank is reported as to be established.

Anniston, Ala.—The Alabama Coal & Iron Co. has declared a dividend of 2 per cent.

Augusta, Ga.—The Graniteville Manufacturing Co. has declared a semi-annual dividend of 5 per cent.

Louisville, Ky.—Louisville Cotton Mill Co. has declared a dividend of 6 per cent.

Louisville, Ky.—The Fidelity Trust & Safety Vault Co., assignee of Clifton Rodes Barret & Co., has declared a dividend of 50 per cent on the claims proved against that estate.

Macon, Ga.—The Southwestern Railroad of Georgia has declared a dividend of 35 per cent.

New Orleans, La.—The New Orleans National Bank has declared a semi annual dividend of \$15 per share.

Richmond, Va.—The Exchange Investment Co. has declared a cash dividend of 10 per cent.

Savannah, Ga.—The Central Railroad & Banking Co. of Georgia has declared a semi-annual dividend of 4 per cent.

Baton Rouge, La.—The Louisiana Fire Insurance Co., of Baton Rouge, has been chartered with a capital stock of \$250,000.

Brooksville, Fla.—The Florida Abstract & Investment Co. has been incorporated with A. G. Hamlin, president, and Alfred Howard, secretary. The capital stock is \$10,000.

Buena Vista, Va.—The Rockbridge Investment Co. has been organized with T. J. Nottingham, president; E. H. Clowes, secretary, and W. A. Wrenn, treasurer. The capital stock is \$100,000.

Knoxville, Tenn.—The Knoxville Schuyler Electric Light Co. has issued \$20,000 of bonds.

Lexington, Va.—The Lexington & Stanley Investment Co. has been organized with W. F. Pierson, president, and W. C. Gilmore, secretary. The capital stock is \$100,000.

Norfolk, Va.—The South Border Investment Co. has been organized with J. T. Elyson, of Richmond, president, and H. A. Hitchcock, secretary. The capital stock is \$30,000.

Richmond, Va.—The National Bond Investment Co. has been incorporated with G. S. Taber, of New Bedford, Mass., president, and C. F. Davis, of New Bedford, Mass., treasurer.

Ridgeway, S. C.—A branch of the Carolina Loan & Investment Co. of Columbia has been organized with I. C. Thomas, president, and W. H. Mood, secretary.

San Antonio, Texas.—The San Antonio International Fair Association will, it is stated, issue \$25,000 of bonds.

Savannah, Ga.—The trustees of the Independent Presbyterian Church will probably issue \$45,000 of bonds to complete the edifice now in course of erection. J. R. Anderson can give information.

Scottsboro, Ala.—J. H. Gregory and others will probably organize an abstract company in Scottsboro.

Waco, Texas.—The Central City Land & Investment Co. has been organized with B. Pease, president, and H. N. Atkinson, secretary. The capital stock is \$100,000.

ANNOUNCEMENTS of "Southern Loan and Bond Investments" appear on page 37 of this issue. This department is a new feature of the MANUFACTURERS' RECORD. Capitalists, loan brokers and bankers will be enabled to secure many safe and profitable investments in the South by examining this column each week.

A Debt to the South.

The South is furnishing an object lesson which alleged Republican statesmen would do well to study. While these gentlemen have been endeavoring to push through political legislation that would create race animosities and disturb the relations between labor and capital throughout the Southern States, that section is rendering a vital service to the business interests of the whole country.

The cotton crop that has just been gathered is one of the largest on record. It is, in fact, estimated at close to 8,000,000 bales. India, Russia and other countries have entered into competition with the United States to an extent which affects our exports of grain. But America's supremacy as the great cotton producer of the world has never been challenged. The heavy export movement of the Southern cotton crop is the main reason for the fact that the balance of foreign trade is in our favor. Within the past week five or six millions of dollars in gold have been brought here from Europe, with a very beneficial effect in allaying the prevalent financial stringency and in restoring tone and confidence to the money market. Every dollar, it can be presumed, represents payment of balances due by Europe for our cotton. Moreover, within a few months some 2,000,000 more bales of cotton will probably be shipped to Europe, the large crop and lower prices stimulating foreign purchases of the staple. This represents \$200,000,000 or more, which will go to our credit in the international balance sheet.

The importance of such a factor in attracting foreign money to this country and thereby aiding the restoration of normal business activity cannot be overestimated. In financial and trade circles it is regarded as the principal ground for confidence in the future. This great service the South is rendering to the industry and commerce of the whole country. To embarrass business and agricultural interests at the South by partisan legislation would be an injury to the trade and finances of every section. N. Y. Star.

A SYNDICATE of Georgia and Northern capitalists have purchased for \$30,000 70 acres of gold lands near Dahlonega, in Lumpkin county. They will put in machinery and work the lands for all they are worth.

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SOUTHERN LOAN & BOND INVESTMENTS.

Under this head the MANUFACTURERS' RECORD will publish announcements, not exceeding one inch four times a week, of offers of real estate loans and several county and other bonds, accompanied by specific statement of amount, time, rate of interest and security will receive free insertion in this column.

\$5,000 DEFERRED PAYMENT NOTES bearing 6% interest secured on real estate in S. Lem. Va., worth more than double the amount. These securities will be sold in sums to suit purchasers at 1% discount. Address ALLEN & TOMPKINS, Salem, Va. d27

WE HAVE ON HAND THE FOLLOWING Richmond, Va., bonds for sale. Write us for full particulars: \$10,000 6%, valuation \$10,000, payable within four years. HENRY L. STAPLES & CO., Richmond, Va. d27

\$700 WELL SECURED LAND NOTES for these amounts with good endorsements - three, four, six and eight months to run. Will be sold in a lump or singly, to net buy at 12%. Address "A. B. C." care Manufacturers' Record, Baltimore, Md. d27

\$15,000 SECURED BY PROPERTY in a Maryland city for which price has been refused: 8% interest. Address "A. B. C." Manufacturers' Record office. d27

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Sterling	—Very dull.	Selling.	Commercial.
60 days.	480	60 days.	476
3 days.	484 1/2		
Francs			
Selling.		Commercial.	
60 days.	521 1/2	60 days.	526 1/2
3 days.	518 1/2		
Reichmarks			
Selling.		Commercial.	
60 days.	94 1/2	60 days.	93 1/2
3 days.	95 1/2	3 days.	94 1/2
Guilders			
Selling.		Commercial.	
60 days.	40 1/2	60 days.	39 1/2
3 days.	40 5/16	3 days.	40 1/2

Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, December 24, 1890.

	BID.	ASKED.
Virginia 3's, new	61	61
N. Carolina 4's	98	99
Charlotte, C. & Aug.	12	12
Car. City & N. S. 5's	103	103 1/2
Wil. Cos. & Aug. 6's	217	217
Atlanta & Char. 10 7's	115	115
Va. Midland 6's	113	113
Va. Midland 5's	99 1/2	99 1/2
Charlotte, C. & Aug. 2d 7's	118	118
Ga. Pacific 1st 6's	108	108
Ga. Pacific 2d 6's	66	66
West. Nor. Car. Cons'd 6's, Gold	98	98

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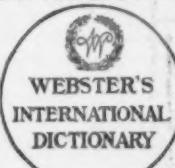
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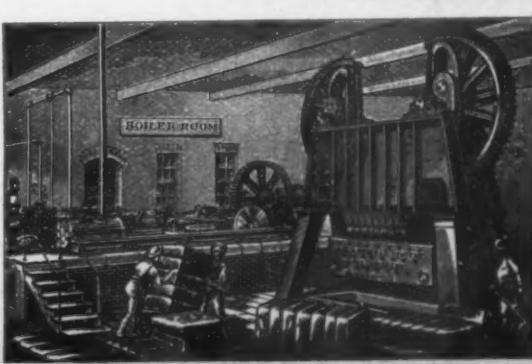
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*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Andalusia—New Town.—Stephen Collins, of Evergreen, has completed the organization of the stock company recently mentioned as to build a new town, with J. M. Whitehead, of Greenville, as president, and Mr. A. Collins as secretary. The capital stock is \$10,000.

Anniston—Car Door Factory.—The Harless Car Door Co. is reported as organized to manufacture the patent car door of J. D. Harless, of Glen Addie.

Birmingham—Brewery.—The Phil. Schillinger Brewing Co. will, it is stated, erect another brewery at a cost of \$20,000.

Fort Payne—Nut and Bolt Factory.—Northern parties are reported as to remove a \$50,000 nut and bolt factory to Fort Payne.

Gadsden—Land Improvement.—Another land improvement company has been organized with F. H. Haralson as president; J. W. Goldsmith, vice-president, and A. L. Beck, secretary. The capital stock is \$10,000.

Montgomery—Pants Factory.—A pants factory is reported as established.

Montgomery—Woodworking Factory.—The George L. Smith Manufacturing Co., lately reported as organized, will, it is stated, consolidate the G. L. Smith mill, at Prattville, with the Montgomery plant, enlarge same and put in new machinery.

Newton—Saw Mill.—The Bloodworth Lumber Co. is erecting a saw mill near Newton.

Pell City—Tannery.—John Maxwell is reported as to erect a tannery.

Talladega—Cotton Factory.—The erection of a cotton factory is talked of.

Tuscaloosa.—The Tuscaloosa Alliance, Mercantile & Manufacturing Co. will hold a meeting on December 18 to consider the increase of its capital stock to \$10,000.

ARKANSAS.

Little Rock—Electric-light Plant.—The city will put additional machinery in its electric-light plant recently mentioned.

Newport—Saw Mill, &c.—It is stated that Chicago (Ill.) parties have recently organized the Kelley & Wells Lumber Mill, and built a \$25,000 plant, consisting of floating saw mill, &c.

Pine Buff—Cold Storage Warehouse.—Henry Cook is perfecting arrangements for the erection of the cold storage warehouse recently mentioned.*

FLORIDA.

Apalachicola—Lumber Mill.—The Cypress Lumber Co. will, it is reported, erect another lumber mill.

Anthony—Phosphate Mines and Works.—Angus Cameron, of Cumberland, Md., and others, previously reported as having organized a company to develop phosphate mines and build works, have incorporated at Martinsburg, W. Va., as the Albion Phosphate Mining & Chemical Co. with a capital stock of \$50,000.

Dade City—Phosphate Lands.—J. T. McLendon and others, of Atlanta, Ga., have purchased the J. L. Clarkson phosphate lands, as recently reported, and will develop same.

Eustis—Water Works.—The stock company previously mentioned as to be organized by Wright & Hazard to construct a system of water works has been incorporated as the Eustis Water & Irrigation Co., with a capital stock of \$15,000.

Florida—Smelting and Phosphate Works.—The Portland Chemical & Phosphate Co. has been organized in Portland, Me., with J. H. Drummond, of Portland, Me., as president, and Lorenzo Taylor, of Jacksonville, Fla., treasurer, with authority to establish smelting and phosphate works in Florida. The capital stock is \$600,000.

Jacksonville—Cigar Factory.—Brach & Middleton have, it is reported, purchased Eichberg & Co.'s cigar factory, and will enlarge and operate same.

Jacksonville—Fibre Factory, &c.—The Florida Fibre Co., reported last week as incorporated to manufacture fibre, &c., has 1,310 acres of land in Dade county on which it will cultivate sisal hemp for that purpose. The company contemplates the erection of a saw mill.*

Jasper—Saw Mill, &c.—J. H. Wright, of Way Cross, is reported as having purchased 6,000 acres of timber land and a saw mill near Jasper, which he will probably operate.

Liverpool—Phosphate Works.—The South Florida Phosphate Co., recently mentioned (under Fort Ogden), is erecting phosphate works at Liverpool.

Ocala—Lime Works.—The Ocala Lime Co. will amend its charter authorizing the increase of its capital stock \$30,000.

Ocala—Gas Works, etc.—S. Benjamin, William Fox, Harvey Knight and others have incorporated the Ocala Gas Light & Fuel Co. to construct gas works, etc. The capital stock is \$50,000.

Ocala—Phosphate Mines.—The Anglo American Phosphate Co., lately reported as organized by Messrs. Snowden, Camp and Jones to develop phosphate mines, has been incorporated with a capital stock of \$400,000.

Owensboro—Phosphate Mines.—George Kaiser, of Cincinnati, Ohio, is reported as to organize a stock company to develop phosphate lands near Owensboro.

Tampa—Publishing.—The Tampa Publishing Co. has been incorporated with W. A. Morrison, president, and H. J. Cooper, secretary. The capital stock is \$5,000.

GEORGIA.

Americus—Machine Works, etc.—Bloom B. Own, C. P. Pavne, and E. P. Harris have incorporated the American Supply Co. for the purpose of dealing in and manufacturing machinery of all kinds. The capital stock is \$10,000.

Athens—Electric-light Plant.—The Athens Manufacturing Co. has put an electric light plant in its cotton factory, as reported in our last issue.

Athens—Cotton Mill.—The Athens Manufacturing Co. has completed and has ready for operation its cotton mill at Barnett Shoals, previously reported.

Atlanta.—A bill has been introduced in the legislature authorizing the Southern Bell Telephone & Telegraph Co., of New York city, to construct and operate an underground system in Atlanta.

Atlanta—Laundry, Water Works, etc.—A bill has been introduced in the legislature to provide for the appropriation of \$25,000 for the erection of a steam laundry, water works, etc., at the State Deaf and Dumb Asylum.

Brunswick—Electric-light Plant.—The Oglethorpe Hotel is putting in an electric-light plant, as stated in our last issue.

Covington—Oil Mill.—The Brick Store Oil Mills will be moved to Covington. J. P. Cook is managing.

Eatonton—Canning Factory.—A. A. Denham is reported as having leased the Eatonton canning factory, and will probably operate same.

Gainesville—Shoe Factory and Tannery.—C. J. Sanders, S. T. Looper and others have incorporated the Finger Shoe & Leather Co. for the purpose of erecting a shoe factory and tannery. The capital stock is \$25,000.

Greensboro—Cotton Factory.—The establishment of a cotton factory is contemplated by Greene county parties.

Hartwell—Cotton Gin, Planing Mill, etc.—J. R. Myers & Co. have purchased a mill and will operate the H. N. Ayres cotton gin, recently mentioned, and may put in planing mill machinery.

Lexington—Granite Quarries.—W. M. Howard and W. H. Sims, of Columbus, Miss., are reported as having purchased 100 acres of granite deposits at Lexington and as to organize a stock company to develop same.

Macon—Sewerage and Drainage.—The bill lately reported as introduced in the legislature to authorize the city to issue \$20,000 of bonds for the construction of a sewerage and drainage system has passed.

Macon—Ice Factory.—Christian Moerlein, of Cincinnati, Ohio, will, it is reported, lease and operate the Central City Ice Works, in Macon.

Rockmart—Land Improvement, etc.—S. R. Hogue, Ellis Davis, J. C. Kimball and others have incorporated the Rockmart Development Co. to improve the town of Rockmart, deal in real estate, etc. The capital stock is \$300,000.

Savannah—Water Works.—It is stated that \$100,000 have been appropriated to construct the water works previously mentioned. The mayor can give information.

Savannah—Bottling Works and Ice Factory.—George Meyer has erected beer bottling works 6000 feet, with an annual capacity of 7,500,000 bottles, and contemplates adding an ice factory in the spring.*

Savannah—Sash, Door and Blind Factory.—The Allen Variety Works is erecting a sash, door and blind factory, as recently reported.

Savannah—Clothing Factory.—A clothing factory is reported as to be established.

Savannah—Iron Works.—William Kehoe & Co. are reported as enlarging their iron works and putting in new machinery for the purpose of manufacturing steam sugar mills.

Wishart—Lath and Shingle Mill.—Mayfield, Wishart & Hobley are erecting a lath and shingle mill, as reported in our last issue.*

KENTUCKY.

Bardstown—Distillery.—The Early Times Distillery Co. will amend charter authorizing the increase of its capital stock to \$100,000.

Bowling Green—Buggy Factory.—A buggy factory is reported as to be removed from New York to Bowling Green.

Cattlettsburg—Furniture Factory.—The Standard Furniture Co., of New York, has purchased the Crowell saw mill and will convert same into an office furniture factory.

Cloverport—Salt Works.—The erection of salt works near Cloverport is talked of.

Grand Rivers—Carriage Factory, etc.—A carriage factory and brick works are reported as to be erected. The Grand Rivers Co. can give information.

Louisville—Cotton Mill.—The Louisville Cotton Mills Co. has increased its capital stock \$50,000 and will put additional machinery in its cotton mill, as reported last week.

Maysville—Saddle and Harness Factory.—T. A. Keith, J. W. Fitzgerald, G. W. Schroeder and others are reported as to organize the Keith-Schroeder Manufacturing Co. to establish a saddle and harness factory, the site for which has been secured.

Middlesborough—Land.—The Middlesborough Town Co. has purchased large tracts of land adjoining its present property, including that of the West End Land Co. The property is valued at \$1,000,000.

Middlesborough—Mining.—Dudderer & Pennington are reported as having leased 36,000 acres of mineral land near Tazwell and as to develop same at once.

Middlesborough—Coal Mines.—The Reliance Coal Co. has been organized with Job Whitehead as president; John Gent, vice-president, and W. T. Evans, secretary, to develop coal lands on Benet's Fork, 500 acres of which it has leased.

Middlesborough—Lime Quarries, etc.—C. H. Loachard, G. L. Washburne and J. B. Hall have incorporated the Black Diamond Fuel Co. to deal in coal, quarry limestone, etc. The capital stock is \$25,000.

Middlesborough—Foundry and Machine Shops.—W. H. Phillips, of Taunton, Mass., will, it is stated, probably remove his foundry and machine shops to Middlesborough.

Middlesborough—Furniture Factory.—A. C. Titus & Son, of New York, N. Y., are reported as having purchased the interests of J. Lewis Patten in the Cumberland Furniture Co. and as to enlarge and put new machinery in that company's furniture factory.

Oak Grove—Saw Mill.—J. A. Stillwell is reported as having erected a saw mill.

Pineville—Furniture Factory.—Beatty & Blane will start a furniture factory, as recently mentioned, and have let contract for the erection of buildings.

Richmond—Planing Mill.—Wardroper & Wallace have secured the Heath warehouse and will, it is reported, convert same into a planing mill.

LOUISIANA.

Breaux Bridge—Oil Mill, Ginnery, &c.—Leon Dupuis will rebuild his saw mill and ginnery recently reported as burned, and contemplates putting in a cotton-seed oil mill.*

Calais—Sulphur Mines.—It is stated that a stock company has been organized to develop sulphur mines.

Concordia Parish—Land Improvement.—S. R. Bertron, of Boston, Mass., representing a syndicate, has, it is reported, purchased 150,000 acres

of swamp lands in Concordia Parish for \$100,000, and will improve same.

Lake Charles—Saw Mill.—The Michigan Lumber Co. is, it is reported, erecting a saw mill.

Mansfield.—The Sodus Supply Co. has been organized with a capital stock of \$10,000. Henry Youngblood is manager.

Morgan City—Ice Factory and Cold Storage Plant.—An ice factory and cold-storage plant is reported as to be established.

New Iberia—Cracker Factory.—A cracker factory is reported as established.

New Orleans—Chemical Works.—The Bokel Drug Co., Limited, mentioned last week, expects to enlarge its laboratory for the manufacture of chemicals.*

St. James—Manufacturing.—The Belmont Planting & Manufacturing Co. has been organized.

MARYLAND.

Aberdeen—Land Improvements.—J. G. Rose of Bel-Air, has purchased the Rogers-White property of 300 acres of land at Aberdeen for \$12,000 and will probably improve same.

Baltimore—Manufacturing, etc.—C. G. Hill, G. R. Webb, F. Littjohn and others have incorporated the Maryland Tree Transplanting Co. for the purpose of manufacturing appliances for removing and transplanting trees, etc. The capital stock is \$10,000.

Baltimore—Piping Factory.—The Sanitary Silex Co., reported in our last issue as incorporated, may erect a factory for the manufacture of its patent piping.

Brunswick—Planing Mills.—C. M. Wender will probably erect planing mills.

MISSISSIPPI.

Bay St. Louis—Water Works.—The Gulf Coast Ice & Manufacturing Co., previously reported, will, it is stated, construct a system of water works.

Brookhaven—Saw Mill and Cotton Gin.—James Russell Sr., & Son are reported as having erected a steam saw mill and cotton gin.

Brookhaven—Planing Mill.—G. S. Gardner contemplates the erection of a planing mill in Brookhaven.

Grenada—Bridge—Contract will be let on January 5, 1891, for the construction of an iron bridge (65-foot span) over Johnson creek. J. T. Thomas can give further information.

Grenada—Bridge.—The King Iron Bridge & Manufacturing Co., of Cleveland, Ohio, has received contract to construct the bridge over Yalobusha river, recently mentioned.

Greenville—Water Works.—The Delta Water Works, Sewerage & Light Co. is reported as to construct a system of water works.

Greenville—Water Works.—M. Philbin, of Chicago, Ill., has made a proposition to complete and put in operation the water works.

Greenwood—Water Works.—The construction of a system of water works is projected.

Hattiesburg—Car Works, Machine Shop, &c.—The Hattiesburg Machinery & Car Manufacturing Co., lately reported, proposes to operate general machine shops, manufacture cars, etc.*

Lumberton—Brick Works, etc.—The Marion Brick & Tile Co. will double the capacity of its brick works, as reported in our last issue, and add dry-kilns to same.

Lumberton Planing Mill, &c.—A. S. Hinton & Co. have recently put dry-kilns in their planing mill.

Vicksburg—Water Works.—The Vicksburg Water Supply Co. will extend its water works, as reported recently.

NORTH CAROLINA.

Bayboro—Canning Factory.—Martin Wagner, J. H. Smith, H. F. Going and others have incorporated the Vandemere Oyster Co. for the purpose of canning oysters, etc. The capital stock is \$10,000.

Beaufort—Canning Factory.—The Carteret Oyster Co., reported in our last issue, has erected its cannery factory and commenced operations.

Bryson City—Pulp Mill.—The erection of a pulp mill is contemplated. N. N. Why can give information.

Bryson City—Insulator Pin and Toy Factory.—The Bryson City Land & Improvement Co. recently reported, has closed contract with Kiser Bros., of Pennsylvania, for the erection of an insulator pin and toy factory in Bryson City.

Payetteville—Cotton Compress.—The establishment of a cotton compress is talked of.

Greensboro—Flour Mill.—L. F. Ross and T. J. Willis, previously mentioned as to establish a flour mill, have incorporated the Oak Hill Roller Mills with J. S. Hunter, president, and L. G. McCulloch, secretary, for the purpose of operating same. The capital stock is \$25,000, with privilege of increasing to \$100,000.

Greensboro—Tobacco Factory.—J. A. Jordan & Co. have contracted for the erection of a tobacco factory.

Greenville—Grist Mill, etc.—Ellington & Cooper have added a grist mill to their machine shop.*

Kernersville—Tobacco Factory.—H. R. Shore, of Shore, will, it is reported, establish a tobacco factory in Kernersville.

Monroe—Canning Factory.—A canning factory will, it is stated, be erected.

Morganton—Gold Mine.—A. A. Conley, of Linville, is reported as developing the old Conley gold mine in Burke county.

Murphy—Furniture Factory.—Pennsylvania parties will, it is stated, establish a furniture factory in Murphy if sufficient inducements are offered.

Nalls—Gold Mine, Stamp Mill, etc.—The Morristown Mining Co., previously mentioned (under Morganton) will be incorporated with a capital stock of \$100,000 and is developing gold mine, erecting stamp mill, etc.

Norwood—Knitting Mill.—It is stated that a stock company is being organized to erect a knitting mill in Norwood.

Ramsour—Saw Mill.—Burgess & Co. will erect a saw mill.*

Randalsville—Saw Mill.—The Red Springs Railway & Lumber Co., of Red Springs, has purchased the McKay saw mill at Randalsville and will probably operate it.

Red Springs—Saw Mill.—J. F. & D. M. McKay will establish a saw mill near Red Springs.*

Rocky Mount—Coach Factory.—Hackney Bros. are reported as to rebuild their coach factory.

Rocky Mount—Tobacco Factory.—A. J. Ellington, of Reidsville, will erect, it is stated, the tobacco factory lately mentioned.

Usharic—Gold Mine.—H. P. Taylor, of Wisconsin, previously reported as developing the Saunders gold mine, has organized in Washington, D. C., the Usharic Mining Co. to operate it.

Wilson—Electric Light Plant and Water Works.—It is stated that the city will issue \$60,000 of bonds for the construction of water works and \$15,000 for the erection of an electric light plant.

SOUTH CAROLINA.

Charleston—Canning Factory.—It is stated that Mahoney & Hunt have erected the oyster canning factory previously mentioned.

Charleston—Dredging.—G. W. Egan, H. S. Corden and C. F. Buchanan have incorporated the Enterprise Dredging & Transportation Co. with a capital stock of \$30,000.

Charleston—Cotton Factory.—A \$100,000 cotton factory is reported as to be erected. H. L. Souchlin can give information.

Columbia—Foundry.—Miller Bros. contemplate the erection of a casting foundry at Columbia Heights to utilize the sandy soil at that point.

Columbia—Kaolin Mines, &c.—The Columbia Kaolin & Improvement Co. will probably increase its capital stock for manufacturing purposes.

Columbia—Land.—A bill has been introduced in the legislature to incorporate the Colleton Land & Improvement Co.

Easley—Broom Factory.—T. K. Hudgens will erect a broom factory.*

Florence—Furniture Factory.—Negotiations are pending for the removal of a furniture factory to Florence. The Florence Improvement & Manufacturing Co. can give information.

Georgetown—Harbor Improvement.—J. F. Gaynor, of Savannah, Ga., has, it is stated, received contract for improving Winyaw Bay, S. C., at \$120,000.

Georgetown—Improvement.—The Georgetown Improvement Association has been organized with G. R. Condon, president; B. A. Munnerlyn, vice-president, and W. D. Moran, secretary.

Georgetown—Ice Factory.—R. E. Frazer, L. S. Ehrlich, S. S. Fraser and others have incorporated the Georgetown Ice Co. to erect the ice factory previously mentioned. The capital stock is \$100,000.

Greenville—Candy Factory.—W. W. Boyce & Co. have started a candy factory, as reported in our last issue.*

Newberry—Electric light Plant.—The city contemplates the erection of an electric-light plant. The mayor can give information.

Pickens—Publishing.—E. S. Griffin, W. T. O'Dell, J. T. Lewis and others have incorporated the Farmers' Publishing Co.

Seneca—Electric Light Plant and Water Works, &c.—W. J. Kirk, Albert Zimmerman, J. W. Bowden and others have incorporated the Piedmont Construction & Land Co. with a capital stock of \$100,000. The company proposes to erect an electric light plant, construct a system of water works, &c.

Spartanburg—Twine Factory.—The Beaumont Manufacturing Co., lately mentioned, has decided to increase its capital stock \$30,000.

Yorkville—Iron Furnaces, Steel Plants, &c.—M. M. Strause, Leon Wallerstein, Samuel Proskauer and others have incorporated (at Richmond, Va.) the York Steel & Iron Co. to deal in

real estate, build iron furnaces, &c. It is stated that the company has purchased iron ore lands near Yorkville on which it proposes to construct iron furnaces and steel plant. The capital stock is to be not less than \$100,000 nor more than \$1,000,000.

TENNESSEE.

Athens—Electric-light Plant and Woolen Mill.—The Athens Woolen Mill is putting new machinery in and increasing the capacity of its woolen mill, and contemplates putting in an electric-light plant.

Bristol—Plow Factory.—It is stated that a \$20,000 stock company will be organized to erect the plow factory, previously reported, to manufacture the patent plows of C. C. F. Agnew.

Bristol—Drug Factory.—The John R. Dickey Drug Co. has been organized with J. R. Dickey, president; J. T. Brand, vice-president and Robert Shaw, secretary. The capital stock is \$100,000.

Cardiff—Iron Works, Steel Plant, &c.—As stated in our last issue (under Chattanooga), Eastern parties will organize the South Tredegar Iron Co. of Cardiff, with a capital stock of \$100,000, and purchase the entire iron works plant of the South Tredegar Iron Co. It is the company's intention to remove the entire plant to Cardiff, erect new and enlarged buildings, manufacture steel, etc. W. P. Rice, of Fort Payne, Ala.; C. L. James, of Boston, Mass.; J. M. Duncan, of Chattanooga, and others are interested.

Chattanooga—Machine Works—Henry Essex W. H. Smith E. M. Eaton and others have incorporated the Essex & Smith Manufacturing Co. to deal in and manufacture castings, implements and machinery.

Cookeville—Pottery.—A party has been investigating with a view to the establishment of a \$10,000 pottery in Cookeville.

Denton—Electric-light Plant.—The city is negotiating with a Boston (Mass.) company for the erection of an electric light plant. The mayor can give information.

Denton—Laundry.—The stock company previously mentioned as being organized to erect a steam laundry will be known as the Dayton Steam Laundry Co. organized by R. P. Short and J. F. Dosson.

Franklin—Mattress spring Factory.—A mattress spring factory has, it is stated, been established.

Hartsville—Saw and Planing Mill.—The erection of a saw and planing mill is probable.

Jackson—Creamery.—An Iowa party is in communication with the Board of Trade relative to the establishment of a creamery in Jackson.

Jasper—Foundry, Wheel and Handle Works.—A foundry, wheel and handle works will probably be established. The Jasper casting factory is lately mentioned.

Jasper—Canning Factory.—J. L. Wesley, of Porterdale, Ga., and others will, it is stated, erect in Jasper the canning factory lately mentioned, at a cost of \$25,000.

Johnson City—Iron Mine.—The Doe Mountain Mining & Improvement Co. is developing the Doe Mountain iron ore property in Johnson county.

Knoxville—Marble Quarries.—An Eastern marble company has leased and will develop, it is stated, marble quarries at Brabson's Ferry near Knoxville.

Knoxville—Electric-light Plant.—The Knoxville Schuyler Electric Light Co. has, it is stated, issued \$20,000 of bonds for the purpose of enlarging its electric-light plant.

Knoxville—Sash, Door and Blind Factory.—A \$10,000 sash, door and blind factory is being erected in Fountain City, as reported in our last issue.

Knoxville—Brick Works.—Caldwell & Co. will establish \$40,000 brick works near Greenaway Station.

Livingston—Canning Factory.—A stock company will be organized, it is stated, to establish a canning factory.

Livingston—Lumber Mills.—The Overton Lumber Co. reported last week as organized, has lumber mills already in operation.

Madison—Pulp Mill.—A pulp mill is reported to be erected.

Mascot—Iron Furnace, Steel Plant, &c.—It is stated that the Northern syndicate, recently mentioned, as to build a new town and construct a steel plant at Mascot, will also build an iron furnace.

Memphis—Electric-light and Power Plant.—A. W. Allison, B. M. Stratton, W. H. Bates and others have incorporated the Crowdus Chemical Electric Co. to manufacture electric-light and power, etc.

Memphis—Saw Mill.—Cooper & Bodman are reported as erecting the saw mill previously mentioned.

Memphis—Saw Mill.—Speers & Morrison are reported as improving their saw mill.

McMinnville—Water Works.—Ingersoll and Peyton, of Knoxville, representing an Eastern syndicate, are reported as having made a propo-

sition to construct a system of water works at McMinnville.

Morristown—Medicine Factory.—The Home Medicine Co. of Home Depot, has, it is stated, made a proposition to the Morristown Medicine Co. for consolidation.

Morristown—Woolen Mill.—A. J. Patterson, of Jonesboro, will, it is stated, erect the woolen mill, previously mentioned at a cost of \$6,000, provided the citizens of Morristown subscribe \$10,000.

Morristown—Manufacturing, &c.—The Morristown Co. reported in our last issue, intends to expend about \$150,000 in building factories and improving its property.

Mortimer—Cotton Mill.—The Eureka Mills is reported as erecting an addition to its cotton factory, and as to put in new machinery.

Nashville—Nurseries.—J. J. Newson has organized The Cumberland Nurseries and, it is stated, purchased the Rossbank and Newson nurseries for \$100,000.

Shelbyville—Ice Factory.—George Logan and others are reported as to organize a \$15,000 stock company for the purpose of erecting an ice factory.

South Watauga—Iron Mines.—The East Tennessee Mining & Improvement Co. is reported as developing iron mines near the Little Doe river.

Tullahoma—Canning Factory and Evaporator.—A canning factory and evaporator will, it is stated, be established.

TEXAS.

Aransas Pass—Lumber Mill.—G. W. Fulton and others have incorporated the Aransas Lumber Co. with a capital stock of \$40,000.

Bowie—Lumber Mill.—J. W. Smelser and others have incorporated the New Boston Lumber Co. with a capital stock of \$25,000.

Brownwood—Oil Wells.—B. Goelet and C. M. M. will sink oil wells.

Corpus Christi—Electric-light Plant.—The Corpus Christi Electric Light Co. will, it is reported, put additional machinery in its electric-light plant.

Decatur—Electric-light Plant.—The Decatur Electric Light & Ice Co. has received contract to light the city.

Fairland (P. O. Chappell)—Cotton Gin.—F. H. Holloway will erect a cotton gin.

Fort Worth—Paper Mill.—The Fort Worth Paper Co., recently reported as organized to erect a paper mill, has been incorporated.

Galveston—Fertilizer Factory.—The Texas Sanitary Association, recently reported as incorporated, proposes to erect fertilizer factories at different points in Texas.

Greenville—Machine Shops.—The Missouri, Kansas & Texas Railway Co. (office, Parsons, Kan.) contemplates the enlargement of its Greenville machine shop, recently mentioned.

Greenville—Artesian Well.—W. L. Berkham has made the city a proposition for the sinking of an artesian well.

Houston—Publishing.—A \$10,000 stock company has, it is stated, been organized to publish a newspaper.

Houston—Iron and Machine Works.—The Simpson, Hartwell & Stippel Manufacturing Co., lately reported as incorporated, already has iron and machine works in operation, and has recently improved same and put in additional machinery.

Iowa Park—Planing Mill, &c.—J. C. Flynn, mentioned in last issue, will erect a planing mill and door factory with corn and flour mill attached.

Marble Falls—Cotton Gin.—The Fair and cotton gin will probably be removed to Marble Falls.

Mineral Wells—Artesian and Gas Wells.—A stock company is reported as organized to sink artesian and gas wells.

Mineral Wells—Electric-light Plant and Water Works.—California parties are reported as to construct the water works previously mentioned; also to erect an electric-light plant. The mayor can give information.

Muldoon—Rock Quarries.—The Muldoon Rock Co. is reported as opening rock quarries.

New Birmingham—Cotton Factory.—Negotiations are in progress for the erection of a cotton factory. The New Birmingham Iron & Land Co. can give information.

San Antonio—Ice Factory.—The Southern Ice & Cold Storage Co. has been incorporated with a capital stock of \$75,000 to erect the ice factory lately mentioned.

Skidmore—Oil Mill and Gin.—A cotton gin and cotton-seed oil mill will, it is reported, be erected.

Temple—Oil Mill.—The Temple Cotton Seed Oil Manufacturing & Refinery Co. has recently been organized to build the cotton-seed oil mill mentioned last week. The capital stock is \$50,000.

Victoria—Land Improvement.—A Nebraska syndicate is reported as having purchased 23,000 acres of land near Victoria, and to improve same.

Waco—Cotton Picker Factory.—The Lone Star Cotton Picking Machine Co. is endeavoring to

make arrangements for establishing a factory in Waco for the manufacture of its patent cotton picker.

Waco—New Town, Land Improvement, etc.—The Boston Waco Land Co. has purchased large tracts of land near Waco, as recently stated, and will lay off the new town of Mount Lynn, sink artesian wells, &c. The officers of the company are M. W. Hausey, president; F. L. Coburn, vice-president, and W. B. Rich, secretary.

Weatherford—Iron Foundry.—It is probable that an iron foundry will be established.

Wolfe City—Glucose Factory.—A Kansas City (Mo.) capitalist contemplates the establishment of a glucose factory in Wolfe City.

Yoakum—Ice Factory and Water Works.—The Yoakum Water Power Co., recently mentioned, will construct the water works and put in an ice machine.

VIRGINIA.

Berkley—Saw Mill.—W. P. Tilley is reported as putting additional machinery in his saw mill.

Big Stone Gap—Saw and Planing Mill.—The Big Stone Gap Building & Investment Co. is reported as having secured site and as to erect a saw and planing mill.

Big Stone Gap—Woodworking Factory.—Florence (Ala.) parties are investigating with a view of establishing a \$100,000 woodworking factory in Big Stone Gap.

Brooke—Pickle Factory.—J. A. Murdaugh, of Fredericksburg, will, it is stated, erect a pickle factory at Brooke.

Buchanan—Steel Works.—J. D. Weeks, E. Dillon, M. H. Payne and others have organized the Buchanan Steel Works for the purpose of manufacturing steel by the Adams direct process. The capital stock is \$100,000.

Buchanan—Shoe Factory.—J. C. Benton, of Buchanan, Mass., is investigating with a view of establishing a shoe factory in Buchanan.

Buchanan—Machine Works.—Machine works for the manufacture of saw mill machinery will probably be moved from Michigan to Buchanan, if S. Shultz can give information.

Clifton Forge—Electric Light Plant.—George Swartz and others are endeavoring to organize a stock company to erect an electric-light plant, as reported in our last issue.

Fairfax—C. H.—Land Improved.—G. A. Williams has, it is reported, purchased and improved a tract of land at Fairfax.

Farmville—Electric-light Plant.—The Electric Light, Heat & Power Co. has been organized with C. M. Walker, president, and J. M. Crate, secretary. The capital stock is \$100,000.

Front Royal—Lime Works.—The Front Royal & Riverton Improvement Co. has secured the establishing of the lime works mentioned last week. Capital stock is \$100,000.

Glasgow—Grate and Mantel Factory, &c.—The Virginia Mantel & Grate Co., lately reported as to operate the grate and mantel factory which was moved from Cincinnati, Ohio, has been incorporated with a capital stock of from \$100,000 to \$200,000.

Glen Wilton—Grate and Mantel Factory, &c.—D. S. Cook is president, and T. D. Kauffman, secretary, of the Princess Iron Co., lately reported as organized to enlarge the Princess iron furnace and build a rolling mill. The capital stock is \$50,000.

Gordonsville—Sewing Machine Motor Factory.—The Clayton Motor Co., of Atlanta, Ga., is reported as to erect in Gordonsville a factory for the manufacture of its sewing machine motors.

Manassas—Stone Quarry.—Mr. Muddiman is reported as having leased the brownstone quarry of John Tillett, and as developing same.

Martinsville—Tobacco Factory.—A Winston (N. C.) company will erect a tobacco factory in Martinsville.

Martinsville—Tobacco Factory.—P. Rucker & Co. will erect a tobacco factory.

Nathalie—Saw and Planing Mill.—J. R. Franklin contemplates the erection of a saw and planing mill.

Old Point Comfort (P. O. Fortress Monroe)—Woodworking factory.—The Huntington Industrial Works is reported as doubling the capacity of its woodworking factory at a cost of \$35,000.

Petersburg—Cotton Factory.—The Ettrick Cotton Factory is reported as to be put in operation.

Radford—Planing Mill and Woodworking Factory.—The Sturdevan French Manufacturing Co. has been organized with J. L. Radford, president; D. V. Sturdevan, vice-president, and Joel Morse, secretary, to operate the planing mill and woodworking factory of Sturdevan & French, recently reported as to be rebuilt.

Roanoke—Machine Works.—The Roanoke Machine Works will probably rebuild its \$25,000 blacksmith shop.

Roanoke—Real Estate.—The Powell Real Estate & Investment Co. has been incorporated with E. Didier, president; A. D. Jamison, vice-president, and A. L. Payne, secretary, to deal in real estate. The minimum capital stock is \$25,000 and the maximum \$50,000.

Roanoke—Medicine Factory, &c.—The Roanoke Drug Co. has been incorporated with a capital stock of not more than \$10,000 to manufacture medicine, etc. W. P. Dupuy is president, and J. D. Eggleston, Jr., secretary.

Roanoke—Mattress Factory.—E. H. Stewart & Co. are erecting a mattress factory, as lately reported. The building will cost about \$14,000.

Roanoke—Real Estate, &c.—The Tidewater Investment Co. has been incorporated with J. H. Cutchin, president; E. H. Stewart, vice-president, and E. J. Bond, secretary to deal in real estate, etc. The capital stock is to be not less than \$10,000 nor more than \$100,000.

Salem—Wire Nail Factory.—The Triple Wire Nail Machine Co., of Parkersburg, W. Va., is reported as having secured site and as to erect a factory for the manufacture of the Hastings wire nails in Salem.

St. Paul—Stove Works.—It is stated that a St. Paul syndicate has purchased for \$300,000 the stove works of Redway & Burton, in Cincinnati, Ohio, and will remove the plant to St. Paul.

Tazewell C. H.—Iron Mines.—William Mahone, of Richmond, Harman Newberry and others have, it is reported, purchased 4,000 acres of iron ore lands near Tazewell C. H. for \$50,000, and will probably develop same.

Virginia—Mineral Land.—B. L. Gregory, of Roanoke, with Baltimore (Md.) and New York parties, has purchased mineral lands in Southwest Virginia, and will organize a stock company to develop same.

Virginia City—(P. O. at St. Paul)—Coal Mines, New Town, &c.—The McQuail Coal & Coke Co., of Bluefield, W. Va., will develop coal land near St. Paul, as recently reported, and build a new town to be called Virginia City.

Warrenton—Land Improvement.—The East Virginia Mineral & Warrenton Improvement Co. has purchased a tract of land near Warrenton, as reported in our last issue, and will lay it off into building lots.*

Waynesboro—Laundry.—E. M. Lambert has, it is stated, organized a \$5,000 stock company to erect a steam laundry, the site for which has been provided by the Waynesboro Co.

West Point—Silk Factory.—A proposition has been made for the establishment of a silk factory. Mayor Wilkinson can give information.

Winchester—Paper Mill.—The American Straw Board Co., of Chicago, Ill., will rebuild its Winchester paper mill, as stated recently.

WEST VIRGINIA.

Eureka—Pipe Line.—Daniel O'Day, of Buffalo, N. Y.; C. N. Payne, of Titusville, Pa.; T. R. Campbell, of Oil City, and others have incorporated the Eureka Pipe Line Co. with a capital stock of \$1,000,000.

Goose Creek—Oil Well.—T. N. Boss will sink an oil well.

Grafton—Electric light Plant.—The Grafton Electric Light, Heat & Power Co. contemplates putting additional machinery in its electric-light plant.

Grafton—Laundry.—I. T. Gooding is reported as to erect a new building for his steam laundry in West Grafton.

Huntington—Publishing.—E. M. Campbell, E. E. Wood, John Ellis and others have incorporated the Huntington Printing & Publishing Co. to publish the Herald.

Martinsburg—Developments, Improvements, &c.—The Martinsburg Miami Manufacturing & Improvement Co. has been organized with G. M. Bowers, president; N. D. Baker, vice-president, and S. W. Walker, secretary, to develop Martinsburg and induce the location of m ufactories, &c. The capital stock is \$50,000.

Meadow Creek Station—Coal Mines.—A syndicate will purchase and develop, it is reported, coal mines at Meadow creek.

Newburg—Coke Ovens and Coal Mines.—Pittsburgh (Pa.) capitalists have, it is reported, purchased coal lands near Newburg from U. N. Orr, will develop same and construct coke ovens.

New Cumberland—Pottery, etc.—New Cumberland and East Liverpool (Ohio) parties have, it is reported, purchased 1,000 acres of land near New Cumberland for \$60,000 and will erect a pottery on same.

Pickaway—Development.—John Osborn, of Buchanan, Va.; J. C. Bullard, of Salt Sulphur; B. F. Irons and others have incorporated the West Virginia Development Co. The capital stock is \$20,000, with privilege of increasing to \$3,000,000.

Ronceverte—Iron Foundry.—The Ronceverte Machine & Foundry Co. has put a new cupola in its foundry, as reported in our last issue.

Wheeling—Power Plant.—F. Barrett, representing the Barrett Elevator Co., of Cleveland, Ohio, is endeavoring to organize a \$50,000 stock company for the purpose of erecting an electric-power plant in Wheeling.*

Wheeling—Electric-light Plant, &c.—The Mount de Chantal Academy will, it is stated, put in an electric-light plant and sink an artesian well.

Wheeling—Oil and Gas Wells.—Adam Hess is president; Asa Booth, vice-president, and A. F. Gasmire, secretary, of the Hess Oil & Gas Co., recently reported.

Wheeling—Oil and Gas Wells.—Asa Booth is president, and J. A. Henry, secretary, of the Hughes Oil & Gas Co., recently reported.

Building Notes.

Abbeville, S. C.—The Georgia Loan Co. has been organized with T. P. Quarles as president, and C. V. Hammond, secretary.

Abilene, Texas—Church.—The members of the First Baptist Church contemplate building an edifice.

Albany, Ga.—Opera-house.—The Knights of Pythias will probably form a stock company to build an opera house.

Americus, Ga.—Depot.—The Central Railroad & Banking Co. of Georgia (office, Savannah) will soon commence building a passenger depot.

Atlanta, Ga.—Opera-house.—L. DeGive is reported as to build an opera-house.

Augusta, Ga.—Market-house.—A bill has been introduced in the legislature authorizing the city to build a market-house. The mayor can give information.

Augusta, Ga.—Office Building.—The Central Railroad & Banking Co. of Georgia (office, Savannah) will, it is stated, erect an office building.

Baltimore, Md.—Masonic Temple.—The Masonic Joint Stock Co. has been incorporated to build the temple for the colored Masons previously referred to.

Baltimore, Md.—Office Building.—The building previously reported as to be erected by the Fidelity & Safe D-posit Co. is to be a fire-proof structure nine stories in height, and to be equipped with fast-running hydraulic elevators, electric and gas lighting and latest improvements. The estimated cost is \$300,000, and Baldwin & Pennington will furnish plans.

Baltimore, Md.—Church.—The members of the Third Christian Church will build an edifice to cost \$8,000. Rev. Thomas Munnell can give information.

Beaumont, Texas—Hotel.—F. T. Smith has secured contract from the Beaumont Car Works for the erection of the hotel lately mentioned.

Bristol, Tenn.—School Buildings, &c.—J. H. Caldwell, mayor, writes that two school buildings will be erected in Bristol at a cost of \$12,000 each; also a market-house, courthouse and city hall will be built.

Charlestown, W. Va.—Hotel.—A large hotel will be built on the property of the Charlestown Mining, Manufacturing & Improvement Co.

Cleburne, Texas—Hotel.—A company has been formed to build a \$15,000 hotel.

Clinton, Tenn.—Opera-house.—An opera-house will be built. Banning Bros., of Knoxville, can probably give information.

Columbus, Ga.—A branch of the Eastern Building & Loan Association, of Syracuse, N. Y., has been organized.

Corpus Christi, Texas—Hall.—The Knights of Pythias contemplate building a hall to cost from \$10,000 to \$20,000.

Ennis, Texas—Depot.—The Houston & Texas Central Railroad Co. (office, Houston) contemplates building a brick passenger depot.

Farmville, Va.—Hotel.—The Prince Edward Lithia Springs Hotel Co. has been organized with S. H. Loving, of Boston, Mass., president, and J. K. Martin, secretary, to build the hotel previously reported. The capital stock is \$100,000.

Fort Worth, Texas—Warehouse.—The Texas Brewing Co. contemplates building a warehouse.

Fort Worth, Texas—College.—It is stated that the Methodists have decided to build the college lately mentioned, and have applied for a charter for the Fort Worth Methodist University. W. L. Vaughn, of Dallas, can give information.

Gainesville, Ga.—A branch of the Covenant Building & Loan Association of Knoxville, Tenn., has been organized with G. T. Kinnett, president, and G. P. Boone, secretary.

Goldsboro, N. C.—Warehouse.—The Goldsboro Storage & Warehouse Co. has been incorporated by E. B. Borden, Henry Weil and Solomon Weil. The capital stock is \$10,000.

Gordon, Texas—Hotel.—A hotel is reported as to be built.

Graham, Texas—A branch of the Central National Building & Loan Association has been organized with R. E. Mabry, president; A. B. Marston, secretary, and B. S. Duty, treasurer.

Greensboro, N. C.—Warehouse.—The Farmers' Alliance contemplates building a warehouse to cost \$10,000.

Greenville, S. C.—J. W. Cagle has secured contract for the erection of two brick store buildings or Mills & McBrayer.

Hardinsburg, Ky.—Jail.—G. W. Beard will receive proposals until January 12 for all the labor and material required in the erection of the jail and residence for jailer, reported in last issue. McDonald Bros., of Louisville, prepared the plans.

Harriman, Tenn.—Hall.—Smith & Lake are reported as to form a company to build a two-story hall 50x75 feet.

Helena, Ark.—Library Building.—J. E. Tinsley, of Staunton, Va., has contract at \$45,795 for the erection of a library building.

Henrietta, Texas—Depot.—The Missouri, Kansas & Texas Railroad Co. (office, Parsons, Kan.) will build a freight and passenger depot in Henrietta.

Houston, Texas—Armory.—G. A. Dickey has prepared plans for the erection of a three-story building, 73x96 feet, for the Houston Light Guards.

Houston, Texas—Gymnasium.—The Houston Turnerville contemplates building a two story gymnasium building 40x100 feet.

Jackson, Tenn.—T. T. Wilson will build a business house and residence, and W. Mcabee two residences.

Knoxville, Tenn.—Clubhouse.—The Tennessee Club will build a stone clubhouse.

Knoxville, Tenn.—Banning Bros. are preparing plans for a \$20,000 residence for J. C. Woodward.

Knoxville, Tenn.—Clubhouse.—The Chilhowee Club contemplates erecting a building to cost about \$40,000. A. J. Albers can give particulars.

Knoxville, Tenn.—A branch of the St. Paul Building & Loan Association has been organized with W. M. Christian, president, and G. W. Hodge, secretary.

Lafayette, Ga.—Asylum.—R. N. Dickerson will receive proposals until January 6 for the erection of an almshouse.

Lampasas, Texas—The Elks Opera House Co. has amended its charter increasing capital stock from \$10,000 to \$200,000.

Laurens, S. C.—The Baptists contemplate building a church. Rev. A. T. Wardlaw can give particulars.

Lexington, Va.—The Lexington Investment Co. is reported as to build a number of houses to cost \$45,000.

Louisville, Ky.—The United States Building & Loan Association.—The association has been organized by V. D. Price, W. T. Grant, Bennett H. Young and others. The authorized capital stock is \$50,000,000.

Manchester, Ky.—The Manchester Building Association.—The association has been organized by R. W. Playford, W. Pearson, H. C. Hudgins and others. The capital stock is \$200,000.

Marianna, Fla.—Hotel.—The Marianna Hotel Co. has been incorporated with a capital stock of \$10,000.

Maryville, Tenn.—Church.—The Methodists will build a church to cost about \$6,000.

Middlesborough, Ky.—Masonic Temple.—The erection of a temple by the Masons is probable.

Mineral Wells, Texas—Hotel.—The erection of a \$75,000 hotel is contemplated.

Mossy Creek, Tenn.—Hotel.—Knoxville capitalists are reported as to build a hotel to cost from \$50,000 to \$75,000.

Pecos City, Texas—The Pecos City Building Association.—The association has been chartered with a capital stock of \$100,000.

Rocky Mount, N. C.—Opera-house.—The building of an opera-house is probable.

South Pittsburg, Tenn.—Opera-house.—The honey & Brown of Chattanooga, have contract for building an opera-house, Hunt & Lamb, of Chattanooga, prepared the plans.

Tallapoosa, Ga.—Bank Building.—The Merchants' and Miners' Bank contemplates erecting a three-story bank building.

Tuscaloosa, Ala.—A branch of the New South Building & Loan Association of New Orleans, La., has been organized with W. G. Cochrane, president, and A. P. Hogan, secretary.

Unicoi (P. O. Johnson City), Tenn.—McDaniel & Stone.—McDaniel & Stone have secured contract at \$25,000 from the Unaka Land & Improvement Co. for building the hotel previously reported.

Valdese, Texas—Opera-house.—Contract has been let for the building of an opera-house to cost \$13,600.

Vicksburg, Miss.—Hotel.—J. B. Reid will probably build a hotel.

Vicksburg, Miss.—Warehouse.—The Standard Oil Co. contemplates building a brick warehouse.

Waco, Texas—Depot, Hotel, etc.—The Boston-Waco Land Co. will build a depot, main building for a hotel and a sanitarium at its new town of Mount Lynn.

Washington, D. C.—W. E. Brown will erect 7 two-story dwellings, 18x45 feet, to cost \$35,000; D. B. Groff, 6 dwellings to cost \$15,000; C. W. Handy, a dwelling to cost \$7,000; Mr. Tschiffely, a three-story brick dwelling to cost \$10,000, and Wright & Stockett, 5 two-story dwellings to cost \$13,000; plans have been prepared by J. C. Johnson for a four-story apartment-house to cost \$10,000, and by Architect Germiller for 4 three-story residences to cost \$17,000.

Washington, D. C.—M. W. Beveridge will erect a residence to cost \$40,000, to have two freight and one passenger elevators; Mrs. McComb, a residence to cost \$25,000, and W. L. Norton, a three-story dwelling, 20x52 feet, to cost \$25,000; James G. Hill prepared plans for the two first, and W. B. Gray for the last mentioned.

Weatherford, Texas—Church.—The Methodists contemplate building a church.

Wilmington, N. C.—Church.—The Baptists contemplate building a church to cost \$15,000.

Winchester, Ky.—Church.—The Presbyterians contemplate building a church.

Wytheville, Va.—A branch of the Iron Belt Building & Loan Association has been organized.

Yorkville, S. C.—Depot.—The Richmond & Danville Railroad Co. (office, Richmond, Va.) will, it is stated, build a depot to replace the one recently burned.

BURNED.

Aberdeen, Miss.—The iron foundry and machine works of Enderline & Beronio.

Americus, Ga.—The brick works of the Ocmulgee Brick Co., near Americus.

Americus, Ga.—The cotton gin of Lucas Hudson.

Baltimore, Md.—The cotton-seed oil mill of A. F. Badart at Lower Canton; loss \$5,000.

Dallas, Texas.—The planing mill of J. S. Philip.

Donaldsonville, La.—The sugar-house of G. Melasher on Bayou Lafourche.

Florence, S. C.—The turpentine still of Holliday & King, near Florence.

High Point, N. C.—The grist mill of Amos Ragan.

Little's Mills, N. C.—The flouring mill of J. P. Little.

Memphis, Tenn.—The ice factory of the People's Ice Co., and the Gage Cotton Pickery; loss \$30,000.

Orange, Texas.—The dry-kiln of the L. Miller Shingle Co.

Petersburg, Tenn.—The flour mill of H. C. Duggins; loss \$12,000.

Racourci, La.—The cotton gin of Ovide Lacombe.

Sheffield, Ala.—The roundhouse of the Birmingham & Tennessee River Railway Co.

Shelby, N. C.—The distillery of John Parker.

Shiob, La.—The Harris cotton gin, near Shiob.

Tolnott, N. C.—The mill of Harris Winstead.

Unionville (P. O. Tunis Mills), Md.—The brick works of James Orr.

Water Valley, Miss.—The machine shop of the Illinois Central Railroad Co. (office, Chicago, Ill.)

**The cotton gins of J. T. Wilson, near Monte-
vallo, Ala.; John Everett, near Troy, Ala.; M. T. Williams, at Toianot, N. C.; Lowry's cotton gin, near Lancaster, Texas; Mr. Galloway, near Ea-
faula, Ala.; J. P. Starr, near Fannin, Va.; J. L. Lawrence, at Alma, Texas; J. B. Harrington, at Columbus, Miss.; W. W. Summerlin, near Ripley, Texas; T. W. Sullivan, near Carrollton, Miss.; W. G. Kizer, near Vicksburg, Miss.; W. H. Evington, at Oakchia, Miss.; P. O. Naheola, Ala.; Tip Gamble, at Roebuck, Miss.; McLean Bros. & Gamble, at Itta Bena, Miss.; Mrs. Arthur Miller, at Rhinehart, La., and Mr. Thompson, near Cum-
way, Ark.**

Buena Vista Notes.

**BUENA VISTA, VA., Dec. 22, 1890
Editor Manufacturers' Record:**

On Friday, December 12, in the presence of the officers of the Buena Vista Co. and the resident officers of the iron company, the new iron furnace was for the first time put in blast. No trouble or hitch was experienced, and the operation of blowing is worked like a charm. The furnace turned out 30 tons of iron the first day of its career, 60 the second, &c., and now the average production is 80 tons per day. 100 tons a day is expected in a week, with 110 to be reached as the regular yield. The importance of this event to Buena Vista is left for speculation. It is enough to say that now our claim to inexhaustible supplies of superior iron ore has been demonstrated, and the principal factor in our future prosperity has been practically started on a firm basis.

Winter comfort in walking for our citizens has been insured by plank walks in various parts of the town, the latest addition to which is one connecting the eastern section with the business portion of the town and extending to the foot of the mountains. These improvements serve the purpose until such time as the streets can be properly paved.

Georgia at the World's Fair.

The commissioners of the respective States and Territories, having returned to their homes from the general meeting in Chicago, are busily employed in stimulating their fellow-citizens to commence preparations for the Columbian Exposition. Col. Charlton H. Way, of Savannah, Ga., is reported as having visited Atlanta to confer with the legislature and State officials as to what can be done by that Commonwealth. Unfortunately for Georgia, there is a clause in her constitution preventing appropriations from the treasury for any but specified purposes. This was discovered in 1881, when the legislature had before it a bill to appropriate money in aid of the Cotton Exposition. At that time the State's Department of Agriculture assumed charge of making an exhibit, and by an appeal to the farmers it secured a varied and attractive display at a trifling cost. The railroads traversing the State made collections of its minerals and woods, which they exhibited. Georgians, proud of their State and its resources, were then greatly mortified to have North and South Carolina, Tennessee and Florida appear to surpass them in enterprise on their own ground, but there was no help for it. The "Empire State of the South" was hampered by its constitution, and had to make the best of it.

It will cause sincere regret throughout the Union if Georgia does not devise some plan that will enable her to appear to full advantage among her Southern sisters at the coming exposition, at which every State of the Union will do its best to contribute to its own glory and to illustrate the grandeur of the nation.

Georgia is blessed with many brainy and energetic citizens, and her people's liberality, often tested, has never been found wanting. If the State as such cannot lawfully furnish the necessary money an appeal to the people will be speedily and fully honored.

CHATTANOOGA people were expecting with good reason that a large tin-plate industry would soon be established in their flourishing city. A Times reporter called the other day upon Capt. H. S. Chamberlain to get an item about it. To him Capt. Chamberlain said: "It is dead." Asked why, he replied: "By the attacks made on the McKinley bill and the results those attacks created. As soon as the McKinley bill passed, a certain syndicate of English capitalists was formed for the express purpose of erecting in Chattanooga a tin-plate factory which would give employment to a large force of workmen. The result of the recent elections, based on a repudiation of the McKinley bill, naturally disconcerted them, and now a letter comes saying that they have decided to abandon the enterprise, owing to the uncertainty of the political situation. I hardly think now that the project

will ever be revived." Captain Chamberlain need not respond. There was a temporary effect produced on the British mind by the exultations of the free trade papers over the late elections, but there has since been a decided reaction in British opinions, as all reliable correspondence from England shows. Chattanooga can have her tin-plate mill yet, notwithstanding the late elections.

Western and Southern Farmers.

Many counties in Kansas have been compelled to resort to extraordinary methods to "keep the wolf from the doors" of impoverished settlers. Among other expedients cash bounties were offered for the scalps of wolves, rabbits and gophers. In Decatur the county treasurer paid out more than \$5,000 in bounties in six weeks, whereupon the county board suspended the order to prevent the treasury from being exhausted. These counties are preparing to issue aid bonds to be used in buying all necessary seeds for the spring planting. It will be "hard lines" for thousands of families in Northwestern Kansas for the next three months.

In striking contrast to their condition is that of the Southern farmers. From the great cotton crop of the season something like a half has been sold, and from 150 to 200 millions of dollars have been paid to its cultivators. A larger proportion than ever have made their food supplies, and have enough to carry them through next summer. The past season has been preceded by four good years, so that the farmers of the cotton States, once sadly in debt to their merchants and commission men, and obliged to pay heavy interests and to mortgage their growing as security, have in large measure paid off their obligations, and have money on hand for all their needs. Before this better time came they never handled any money. Their mortgaged crops were turned over to their creditors, who sold it, and the money went directly to the banks. The Southern farmers do not usually keep bank accounts, and consequently their money will not get back to the great centers as quickly as it did when they were poor. They hold it until they have occasion to make purchases. Such is the present strength of the cotton growers of the South that, at some of the Alliance conventions held within a year, it was seriously proposed to hold back a large part of the crop unless prices were satisfactory. Fortunately this was unnecessary, but had it been otherwise, the great body of the growers would have been able to carry out that position.

As there is an annually increasing demand for all the South's staple crops, and for its oranges, melons, grapes and miscellaneous "truck," there is a brighter future for the farmers of that section than for their brethren in the North and West.

SILVER-WHEAT-COTTON.**How Their Respective Values Rise and Fall in the Same Ratio.**

There must surely be some important legislation on the silver question by this Congress. The difficulties attending such legislation will undoubtedly be confined to details. A great revolution has taken place in the minds of the people on the money question, and especially on the silver question. On that question they are now practically united. The question of an adequate and fixed volume of legal tender money will soon follow, and no public man can stand long in the pathway of either.

The people have for many years felt that something was wrong somewhere. That there was some cause why, with increased toil and economy, the end of each year found them poorer than at its beginning, and in various ways they have appealed to their representatives for relief.

American producers now know, if their representatives do not, that that cause is a lack of sufficient money to pay fair prices for the vast products of their industry. They know, if some of the great newspapers of the country do not, that while importing countries can buy silver bullion at a discount and then coin it at its full par value for use in India, Egypt, Russia and other silver-using countries, that the price of American products will be depreciated in competition with the products of those countries in exact ratio to the difference between the price paid for silver bullion and its coined value in the countries where it is used, which during the past few years has amounted to about 30 per cent.

England has been the chief gainer by the demonetization of silver. She coined the money for India and Egypt. She must import two-thirds of her bread, food and provisions or her people would starve. The manufacturing and handling of cotton is her second most important industry. We raise near three-quarters of all the cotton raised in the world. She has saved, and American cotton and wheat producers have lost, on an average more than \$125,000,000 on those crops during each of the seventeen years since silver was demonetized, in 1873.

Many maps have been published in commercial papers of Europe showing how absolutely the price of wheat and cotton in the markets of the world are governed by the price of silver when it is treated as a commodity. We need not look back but a few months or even weeks to prove this statement by our own experience.

For some time after the passage of the silver act of July 12, 1890, and while silver bullion was selling at from \$1.15 to \$1.20 per ounce, the price of cash wheat ranged at about \$1.06 per bushel in Chicago, and cotton at about 11 cents per pound to its producers. When silver declined to \$1 per ounce wheat declined from 15 to 18 cents per bushel and cotton to from 9 to 9½ cents per pound.

Now the loss of 15 cents per bushel on a 400,000,000-bushel crop of wheat, as is our estimate for this year, amounts to \$60,000,000 to its producers, and a loss of 1½ cents per pound, or 15 per cent., on 8,000,000 bales or 3,600,000,000 pounds of cotton, also amounts to \$60,000,000.

The price of all American products that come in competition with the products of silver-using countries show a similar fate. What a commentary on American statesmanship to have permitted or to still permit such conditions to exist. Who can estimate the suffering the absence of this vast amount of money has brought about, or the happiness and prosperity its expenditure here would have afforded the American people and their industries?

It is disgusting to hear people talk about this effort to remonetize silver being a

movement in the interest of silver producers, when such recent events prove that by the decline in silver the loss on either wheat or cotton has amounted to more than the value of the entire yearly product of silver in this country.

The Secretary of the Treasury in his report says that the small amount of surplus silver afloat in this country enables speculators to control its price, and yet it is proposed that he shall be a year in buying up that small surplus. Why? Is it to enable these speculations to be continued during another year, and thereby control the price and rob American farmers out of their just dues on another crop? No other logical reason can be given.—George O. Jones in Washington Post.

OUR Canadian neighbors mean business. The Canadian Pacific Railroad has been open to traffic for quite a while, and steamers have been plying between its western terminus and the ports of Asia, carrying European freights abroad and bringing back cargoes of tea and other merchandise of China and Japan for transportation to the Atlantic and reshipment to England. The business pays well, and every effort will be made to increase it. Last Monday evening a large company of people met at the New York offices of the Canadian Pacific Railway Co., at 353 Broadway, upon the invitation of Mr. E. V. Skinner, the general Eastern agent of the road. The room was decorated with Chinese lanterns in compliment to the many representatives of the great Chinese mercantile houses who were among the guests. The attraction of the evening was a model of the company's new steamship, the Empress of India, which is expected to begin her first voyage from Hong Kong to Vancouver, January 15. This steamship is one of three for which contracts were taken by the Naval Construction Co., of Barrow-on-Furness, Great Britain. The second of the line, the Empress of Japan, is expected to sail from Hong Kong, March 3, and the Empress of China, now in the builders' yards, will be finished and sent to her station as soon as possible. All three ships are 440 feet long, 51 feet wide, 31 feet deep, and of 5,700 gross tons. They have double-bottom steel hulls, triple expansion engines and twin screws. They are expected to make 19 knots an hour, which will enable them to make the distance from port to port in 12 days. Cargoes carried by the steamers now employed have been delivered at Liverpool in 28 days from Hong Kong, and these ships are expected to reduce the time 3 days. They were built upon plans approved by the British Admiralty and are well armed. While nominally subsidized by the Canadian government, it is generally believed that the Admiralty indirectly pays the bills. Here are powerful competitors for the carrying trade between Asia and Europe, of which Americans, ever since the transcontinental roads were built by our government, have supposed that they had the monopoly.

P. EMANUEL, Esq., of the Aiken, S. C., bar, has patented a process by which he hopes to convert kaolin into aluminum at a cost of \$2.50 a ton.

LLANO, TEXAS

The Foundation for a Great Industrial Center—The Railroads See It.

The foundation for a great industrial city is being laid here. No one can doubt who comes here and makes a careful investigation of the resources of this section, but will say that here is to be the great manufacturing city of the Southwest, and from the way in which the railroads are building and preparing to build here, it would seem that they also appreciated the fact. Her citizens feel confident of her future greatness, and are backing their faith by placing their money in brick and stone buildings. The well-known civil engineer and mining expert, Judge M. L. Lynch, of Fort Worth, is here making a survey for a system of improvements for the Llano Improvement Co. to consist of water works, sewerage and a dam across the Llano, a swift and beautiful river which flows by the town. This dam will be built on a natural ledge of granite which extends across the river and will be constructed from granite which can be found on the ground. Judge Lynch estimates that there will be a working power of 30 feet, which, after furnishing power to pump water for the water works, generating electricity for motors and lights, will furnish plenty of power for cotton and woolen mills, granite and marble-polishing plants and other manufacturing enterprises. Overlooking the town is a hill about 300 feet high. Here will be erected a stand-pipe to which the water to supply the city will be pumped. This will afford a static pressure of 130 pounds to the square inch at any point in the city. Judge Lynch is very enthusiastic over the resources and possibilities of this section. He and all of the citizens of Llano are very anxious to see the Fort Worth & Rio Grande extended here, as they are very anxious for more intimate relations with Fort Worth, as they realize fully what such relations mean to them. In speaking to Judge Lynch in regard to this section he said: "The mineral and geological features of this country are something extraordinary, and have been quite a surprise to me, especially the iron deposits, which are very valuable, being mainly black magnetic, very low in phosphorus, from .014 to .046, and from 64.15 to 68.67 per cent. of metallic iron, which places them in the front rank of Bessemer ores. This means much more to Texas than would at first sight appear, owing to the scarcity of such ores in the United States and the cheapness with which such ore can be converted into steel by the Bessemer process without resorting to the more expensive method of dephosphorizing by the basic process, as is necessary in treating common ores. In addition to this manganese of high grade is found, a small quantity of which is required in the process of steel making. To give an idea of the value of such deposits it is only necessary to say that this class of ore is shipped thousands of miles, from Cuba to Pennsylvania and from the Lake Superior region to Ohio and Pennsylvania and other sections of the country, and while the Cuban ores are low in phosphorus, they do not average over 50 per cent. of metallic iron, and there is but one mine, the Great Republic, in the Lake Superior district, that shows as high a percentage of metallic iron as the ores of this section.

In this connection it seems to me that Fort Worth occupies a favorable position with reference to these deposits, being only about two hundred miles distant on a direct line to the Rio Grande road, which will no doubt be extended here in the near future, by which the ore could be laid down at a low figure, and with the fluxing material already present in abundance, it would be a question of bringing the fuel at a reasonable cost to smelt these

ores, which would place the town in an enviable position in regard to iron manufacturing, and if the coal along the headwaters of the West Fork of the Trinity and the Upper Brazos can be made available for the purpose, there is no reason whatever why Fort Worth should not only smelt these ores, but roll the product into bar iron and steel, I beams, channel bars and bridge shapes generally, make barbed wire and nails, and the many other articles of every-day use.

As to the many specimens of building stones here, they are simply innumerable and in profusion all over the country. Granite, both gray and red, marble of various colors, including the most beautiful white statuary marble, fully equal to that furnished by the celebrated quarries of Carrara in Italy, all of which I have personally seen and examined and taken specimens of. As a matter of fact, this is one of the strongest and most extraordinary mineral countries I have ever seen, as in addition to the useful minerals and stones mentioned, it abounds in the rarest minerals which can be picked up all over the country, including gadolinite, amylbdenum, garnets, agates, etc., etc., and scores of others that I do not even recognize or know the names of. It would appear as if nature went on a grand frolic, to see how many rare minerals she could assemble together in one given space.

As to the future of this section, you can say that it cannot be held back. She has some things to offer which the world needs. This is undoubtedly one of the great mineral regions of the country, and will repay a visit."—Fort Worth Gazette.

New Railroads for Dallas.

DALLAS, TEXAS, Dec. 18, 1890.

Editor Manufacturers' Record:

The Dallas & Hillsboro Railway, another branch of the Missouri Pacific, is nearing completion. The grade has been completed and track-laying is now within fourteen miles of Hillsboro, and proceeding at the rate of a mile a day. Being completed even this late in the season, it is predicted that the new road will be the means of adding 20,000 bales to Dallas' cotton receipts this year. This road passes through a section of the finest agricultural region in Texas, and it furnishes a direct outlet to central points in the State and to the south and coast.

A franchise has been granted for another electric street railway from the business center of the city out northeast of Thomas Avenue to Haskell Avenue to the fair grounds. This new line is to be built and put in operation without delay. The line will be about four miles long. Including the mileage in the city and the suburban lines in operation and those to be built, Dallas will in the near future have something like 100 miles of street railway.

The following, showing the financial condition of the city, is taken from a report furnished the State Commissioner of Insurance, statistics and history up to and including the last fiscal year which expired April 21: Assessed value of all property in 1889, \$23,000,000; assessed value of all property in 1890, \$33,000,000; rate of taxation for all purposes, 150 per cent; receipts from all sources for the fiscal year ending April 21, 1890, \$1,028,862.24; disbursements for the same period, \$950,594.47; cash on hand April 21, 1890, \$78,267.77; total value of all property owned by the city, \$1,500,000; number of square miles in corporate limits, 10; bonded debt April 21, 1890, \$1,083,600; floating debt, nothing.

To SOUTHERN corporations, bankers and brokers: The MANUFACTURERS' RECORD will give investment offerings four insertions free, announcements not to exceed one inch in space.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Ammonia Plant.—The Bokel Drug Co., New Orleans, La., wants estimates on a plant for manufacturing ammonia.

Barril Factory.—F. P. Gates, Bayboro, N. C., wants information as to cost of erecting a barrel factory.

Boiler and Engine.—The Mason Milling, Ginning & Manufacturing Co., Mason, Texas, wants a 11x16 automatic engine and a 53 horse-power boiler.

Boiler and Engine.—The Barrett Elevator Co., Cleveland, Ohio, will want prices on boiler and engine.

Boilers and Engines.—Henry Cook, Pine Bluff, Ark., will purchase boilers and engines.

Boiler and Engine.—W. N. McAnge & Co., Suffolk, Va., want a coil or pipe boiler for steam launch, with engine 5x6.

Brass and Iron Foundry.—Outfit for brass and iron foundry at Shendun will be purchased. Address E. R. Armentrout, president, Port Republic, Va.

Brick Machinery.—The East Virginia Mineral & Warrenton Improvement Co., Warrenton, Va., will probably purchase brick machinery.

Bridge Metal.—The Winston-Salem Lumb & Improvement Co., Winston, N. C., want material for an iron bridge 100 feet long and 60 feet wide.

Broom Machinery.—T. K. Hedges, Easley, S. C., wants machinery for a broom factory.

Candy Factory.—W. W. Boys & Co., Greenville, S. C., wants a lump cutter and a crimping machine for candy factory.

Car Works.—The Hattiesburg Car & Manufacturing Co., Hattiesburg, Miss., will need machinery for car works plant.

Cotton Gins.—Leon Dupuis, Breaux Bridge, La., will purchase two cotton gins.

Cotton Press.—L. D. Daus, Breaux Bridge, La., will purchase a cotton press.

Crushers.—Matthew Hays & Co., Tampa, Fla., wants the addresses of manufacturers of rock crushers.

DYNAMOS.—The Barrett Elevator Co., Cleveland, Ohio, will want prices on dynamos.

Elevator.—The Mason Milling, Ginning & Manufacturing Co., Mason, Texas, wants a Thomas elevator complete for cotton gin.

Elevator.—J. A. Jordan & Co., Greensboro, N. C., will purchase elevator for a tobacco factory.

Engine.—Secretary Chamber of Commerce, Bristol, Tenn., wants prices on a 30 horse-power engine.

Engines.—W. A. Grimes, Sparta, Ga., wants to correspond with manufacturers of marine engines.

Fertilizer Factory.—The Texas Sanitary Association, Galveston, Texas, will probably purchase fertilizer machinery.

Fibre Machinery.—The Florida Fibre Co., Jacksonville, Fla., will need machinery for extracting fibre from sisal hemp.

Fire Engines.—The city of Nashville, Tenn., will purchase two steam fire engines, two chemical engines and other fire apparatus. Board of fire commissioners can be addressed.

Flour Mill.—The Mason Milling, Ginning & Manufacturing Co., Mason, Texas, wants machinery for a 25-barrel roller flour mill, short process.

Grading Machinery.—The East Virginia Mineral & Warrenton Improvement Co., Warrenton, Va., will probably purchase machinery for grading land.

Heating Apparatus.—J. A. Jordan & Co., Greensboro, N. C., will probably purchase steam heating apparatus.

Heating Apparatus.—B. A. Smith, Rutherford, Tenn., may want steam heating apparatus.

Hose.—The board of fire commissioners, Norfolk, Va., wants proposals for furnishing 1,000 feet of rubber hose, 2½ inches in diameter, 4-ply, with sly-capped ends, couplings to match.

Ice Machines.—George Meyer, Savannah, Ga., would like to correspond with manufacturers of ice machinery.

Iron Furnace.—The North Carolina Steel & Iron Co., Greensboro, N. C., wants specifications

and estimates for the construction of a 75-ton blast furnace.

Iron Lathe.—B. A. Smith, Rutherford, Tenn., will want two iron lathes.

Iron Planer.—Ellington & Cooper, Greenville, N. C., want a planer for machine shop.

Iron Roofing.—B. A. Smith, Rutherford, Tenn., will want iron roofing.

Maching Shop.—A complete outfit for machine shops at Shendun will be purchased. Address E. R. Armentrout, president, Port Republic, Va.

Motors.—The Farwell Elevator Co., Cleveland, Ohio, will want prices on electric motors.

Oil Mill.—L. D. Dupuis, Breaux Bridge, La., wants information and prices on cotton-seed oil mill.

Pattern Shop.—Secretary Chamber of Commerce, Bristol, Tenn., wants prices on machinery for pattern shop.

Planer.—Secretary Chamber of Commerce, Bristol, Tenn., wants prices on a 60 inch in. planer.

Planing Mill.—J. R. Franklin, Nathalie, Va., wants prices on planing mill machinery.

Polishing Stand.—The Harry Myers Manufacturing Co., Nashville, Tenn., wants a second hand all iron polishing stand for plater.

Pulley, &c.—The Mason Milling, Ginning & Manufacturing Co., Mason, Texas, wants pulley and shafting.

Pumps.—Henry Cook, Pine Bluff, Ark., will purchase pumps.

Refrigerator Machinery.—Henry Cook, Pine Bluff, Ark., will purchase a refrigerating machine.

Saw Mill.—J. R. Franklin, Nathalie, Va., wants prices on saw mill machinery.

Saw Mill.—J. F. & D. M. McKay, Red Springs, N. C., will purchase a saw mill outfit.

Saw Mill.—Burgess & Co., Ramseur, N. C., will prices on saw mill outfit.

Sales.—The Mason Milling, Ginning & Manufacturing Co., Mason, Texas, wants a ton Howe wagon scale.

Smoke Machinery.—J. Perry, High Point, N. C., wants two spoke lathes.

Steam Launch.—The Florida Fibre Co., Jacksonville, Fla., will want a small steam launch.

Surface Planer.—B. A. Smith, Rutherford, Tenn., will want a surface planer.

Washing Plant.—The Hamburg Phosphate Co., Ocala, Fla., wants a drum washer, with screen combined, to wash 250 to 300 tons of phosphate rock daily.

Water Works.—The Cisso Water Co., Cisso, Texas, wants complete outfit for water works.

Wind-mill.—J. S. Rogers, Wigginsville, Ga., wants to purchase a wind-mill.

Woodworking Machinery.—Mayfield, Wishart & Mobley, Wishart, Ga., want prices on gang lath mill and bolter.

Woodworking Machinery.—J. H. Burges (dealer), Ramseur, N. C., wants price on a flooring machine, surfacing machine and moulder.

Woodworking Machinery.—An outfit for wood working shop at Shendun will be purchased. Address E. R. Armentrout, Port Republic, Va.

Literary Notes.

CENTURY for January contains the first instalment of selections from the Tallyrand Memoirs, preceded by a pea picture of this most famous of French diplomats, the work of Minister Whitelaw Reid. This publication will be the first to appear in any country.

THE FORUM for January contains an article on "Revolution in Medicine," by Dr. Austin Flint, of New York, that explains Dr. Koch's treatment of consumption and the probable early extension of the system to the cure of other diseases that are caused by bacilli. Other articles that will interest the general reader are "The Division of Africa," by Prof. Emile de Laveleye, the Belgian publicist; "Formative Influences," by President Timothy Dwight of Yale College; "Does the Negro Seek Social Equality?" by Rev. J. C. Price, president of a successful college for colored youth at Salisbury, N. C., and "Reform in Railroad Construction," by Oberlin Smith.

THE holiday edition of the Pulaski (Va.) News is a fine illustration of what a spirited publisher and a wide-awake editor of a country weekly can do when assisted by good compositors. "A town's press is a safe criterion of its life and stability." The News has done its part to prove this; it only remains for the citizens of Pulaski and the adjoining country to do their and both parties will prosper accordingly.

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PROPOSALS.

PROPOSALS FOR SEWERS.—Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Winston, N. C., at the Mayor's office of said city, until 1 o'clock P. M. Friday, January 1, 1891, for the construction of a part of the proposed System of Pipes for said city. Copies of the general plans and specifications, forms of proposals and instructions to contractors and any information relative thereto may be obtained from the Chairman or Engineer of the Sewerage Committee. The Committee reserves the right to reject any or all bids. J. W. ALLSPAUGH, Chairman Sewerage Committee. J. L. LUDLOW, Engineer.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 1 o'clock P. M. on the 13th day of January, 1891, for all the labor and materials required to put in place complete the Cast Iron Columns in Basement, the Stands for the First Story Columns, and the Iron Beams, Girders, &c., for the first floor of the U. S. Postoffice, Courthouse, &c., building at Troy, N. Y., in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Superintendent at Troy, N. Y. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for Iron Columns in Basement, First Floor Iron Beams, Girders, &c., for the U. S. Postoffice, Courthouse, &c., at Troy, N. Y., and addressed to JAS. H. WINDRIM, Supervising Architect. December 17, 1890.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 1 o'clock P. M. on the 13th day of January, 1891, for all the labor and material required for the Plumbing, Gas Piping, etc., for the U. S. Courthouse, Postoffice, &c., building at Denver, Col., in accordance with the drawings and specification, copies of which may be had on application at this office or the office of the Superintendent at Denver, Col. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for the Plumbing, Gas Piping, etc., for the U. S. Courthouse, Postoffice, &c., at Denver, Col., and addressed to JAS. H. WINDRIM, Supervising Architect. December 17, 1890.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 1 o'clock P. M. on the 7th day of January, 1891, for the iron beams, etc., for first floor, basement columns, &c., for the U. S. Postoffice, &c., building at Scranton, Pa., in accordance with drawing and specification, copies of which may be had on application at this office or the office of the Superintendent at Scranton, Pa. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for Iron Beams, &c., for the First Floor and Basement Columns, etc., for the U. S. Postoffice, &c., building at Scranton, Pa.," and addressed to JAS. H. WINDRIM, Supervising Architect. December 11, 1890.

UNITED STATES ENGINEER OFFICE, ST. AUGUSTINE, FLA., NOV. 26, 1890.

Notice is hereby given that on the 27th day of December, 1890, at 12 o'clock noon, standard time, I will sell at Mayport, Fla., for cash, to the highest bidder, the wreckage from the bark "Neva," consisting of about 25 cords (more or less) of log-wood. The wood is apparently in good condition. It is in sticks from 2 to 5% feet long and from 3 inches to 20 inches in diameter. The wood must be removed within 30 days from sale and until removed will be at owner's risk. For further information apply to this office. W. M. BLACK, Captain, Corps of Engrs., U. S. A.

The Plumbers' Favorite

Haines, Jones & Cadbury Co.'s

IMPROVED

Blast Furnace.

Will melt 10 pounds of solder in six minutes.

Haines, Jones & Cadbury Co.

1130 Ridge Ave.

PHILADELPHIA, PA.

For Sale.**Railway Equipment.**

If interested send for our Catalogue No. 13, just issued, of Locomotives, Cars, &c., of every description, for all kinds of work.

A. S. MALES & CO.,
15, 16 and 17 Aetna Building, Cincinnati, O.

Railway Equipment.
REGINALD CANNING & CO.

115 Broadway, New York.
Have on hand for sale all kinds of SECOND HAND ROLLING STOCK.

Established 1855.

GEORGE PLACE.

Late the George Place Machinery Co.
Equipment of Railway and Car Works
EQUITABLE BUILDING,
120 Broadway. — NEW YORK

Steam Fire Engines
FOR SALE.

One Hunneman and one Button in first-class condition. Also all kinds of second-hand Engines and Boilers for sale cheap. For terms, prices, &c., address

Lowell Steam Boiler Works,
LOWELL, MASS.

Estimates given on New Work of every description.

FOR SALE.

ONE OF THE LEADING NEWSPAPERS AND JOB OFFICES IN MISSISSIPPI, doing a good business. The only reason for selling is the proprietor having recently been disabled by paralysis. It is the official journal of the county.

Address THE DISPATCH,
Columbus, Miss.

COTTON MACHINERY FOR SALE, made by Bridesburg Manufacturing Co. 4,000 spindles, carding, &c., entirely complete and in very good condition. Will be sold at a great bargain for cash. Address "D. W. O.", care Manufacturers' Record, Baltimore, Md.

Textile Machinery
FOR SALE.

Picking, Carding, Roving, Spinning, Spooling, Twisting, Reeling, Warping, Weaving and Finishing for Cotton and Woolen Mills. Very large stock to select from in our storehouses here, of over two acres of floorage.

JEREMIAH CLARK,
Lewell, Mass. Office, 63 Dutten St.

FOR SALE.**Cotton-Seed Oil Mill and Fertilizer Factory.**

On the 15th day of January, 1891, the plant of the Winnsboro Oil Mill & Fertilizer Company will be sold to the highest bidder. Plant and buildings new; capacity twenty tons.

For particulars apply to

U. C. DESPARTES, Prest.

WINNSBORO, S. C.

SECOND-HAND WOODWORKING MACHINERY FOR SALE.

24-in. 6-Roll Single Surface Planer & Matcher \$275
24-in. 'Sweepstakes' Planer, Match, & Moulder 175
24-in. J. A. F. & Co. 'Little Champion' Pl. & Mch 200
24-in. J. A. F. & Co. Double Drum 6-Roll Sander 175
Colburn 2-Spindle Blindsides Boring Machine 35
Band Saw, 18-inch wheels, iron table, 55
No. 2 J. A. F. & Co. Resawing Mach. 22-in. saw 105
No. 6 Sturtevant Press Blower, countershaft. 85
6x6 Vertical Engine, 100
35 h. p. Portable Boiler, 200
25 h. p. Tubular Boiler, 150

JAMES JENKS,

Dealer in Machinery, 199 Jefferson Avenue, Detroit, Mich.

FOR SALE CHEAP.**100 Horse Power Engine.**

1 First-class second-hand 18x30 inch Plain Slide Valve ENGINE, built by Frick & Co. Completely overhauled and good as new. Fly wheel in 6 segments, 12 feet diameter by 20 inch face, also
2 Second hand Horizontal Two-flue Cylinder BOILERS, 40 in. diameter and 30 feet long. Just the thing for a saw mill, where economy of fuel is no object. Address

REUTER & MALLORY,

BALTIMORE, MD.

OLNEY BROTHERS,

N. E. Agents for

Binghamton Cylinder & Spindle
AND DEALERS IN
Sperm, Lard, German,
Spindle and Wool
140 CONGRESS ST., BOSTON, MASS.

OILS

CARLISLE MFG. CO.
Cars, Engines, Frogs
AND SWITCHES,
CARLISLE, PA.**SYRACUSE ROLLING-MILL MACHINERY.**

One 500 h.p. Vertical Buckeye Engine, 34x30 in. One 300 h.p. Vertical Corliss Engine, 34x36 in. Four Trains, 19, 16, 14, 9 and 8 in. Rolls, 3 high, with over 200 new spare, including Rolls, Housing and Bed-Plates all of modern construction. One Large Squeezor, Ore Crusher, Shears, Scales, Sturtevant Blowers, Shafing, &c. Four Steam Pumps, three Blake, one Dean. Four 80, one 50 h.p. Tubular Boilers, double riveted, flue front and full fixtures. New Fly Boiler, 50 h.p., and others, good order. Porter Horizontal Engine, 80 h.p.; Vertical Engine, 60 horse. One 8x10 High Speed Engine. Complete Machine Shop Tools, Lathes, &c. One first-class Ingersoll Compressor, 24x30. Five Steam Drills.

Address **CEO. M. CLAPP, Agt.,**
74 Cortlandt Street, New York.

Second-Hand Machinery Cheap.

1 5-H.P. Portable Engine and Boiler, on wheels. 1 10-H.P. Portable Engine and Boiler, on skids. 1 No. 1 Universal Grinding Machine. B. & S. 1 No. 2 Universal Grinding Machine, 40 in. bet. centers. Brown & Sharpe. 1 No. 2 Two-Spindle Profiling Machine. Bement. 1 Trip Hammer. 1 No. 7 Root Blower. 1 No. 3 Sturtevant Exhaust. 1 No. 3 Universal Miller. Brainard. 1 No. 1 Plain Miller. Brown & Sharpe. 1 Horizontal Drilling Machine. 1 Set 12 in. x 10 ft. Power Bending Rolls. Write us for what you want and send description of Machinery that you wish to trade or sell.

THE J. A. MACKINNON MACHINERY CO.
22 Warren Street, New York.

SECOND-HAND MACHINERY.

1 Iron Pl., planes 8 ft. long, x 56 in., 24ds. Sellers. 1 " " 39 ft. long, 70 in. wide, 2 heads. 1 " " 30 ft. " 30 in. 1 Engine Lathe, 20 ft. bed, 72-in. swing. Good. 1 Engine Lathe, 16 ft. bed, 60-in. swing. 1 Engine Lathe, 10 ft. bed, 20-in. swing. Good. 2 Engine Lathes, 8 ft. bed, 18 in. swing. 1 Engine Lathe, 6 ft. bed, 15 in. swing. 1 " " 18 " " chuck. and various other sizes.

1 Small Turret Head Lathe. 1 24-in. S. F. Blaisdell Drill. Good. 1 20 inch Plain Drilling Machine. 1 48-in. Vertical Boring Mill. 1 No. 10 Styles & Parker Press. 1 Lincoln Pattern Milling Machine. 1 11 ft. 24 in. Stover Dimension Planer. Send for list Second-hand tools.

NEW YORK MACHINERY DEPOT,
Brooklyn Bridge Store, 18, New York.

BARGAINS.—Second-Hand Machinery.

L. F. SEYFERT'S SONS,
Nos. 437, 439, 441 N. Third St., Philadelphia, Pa.
1 100 h.p. Corliss Horiz. Engine, cyl. 20x48 in.
1 100 h.p. Horiz. Engine, cyl. 18x35 in. Rickards.
1 75 h.p. Horiz. Engine, cyl. 12x24 in. Rickards.
1 40 h.p. Vertical Engine, cyl. 12x14 in. Naylor.
1 50 h.p. Lidgetwood Hoisting Eng., cyl. 10x12 in.
1 6, 10, 15 & 20 h.p. Portable Hoisting Engs., single & double cyl. & drum. Combined & single.
1 12 h.p. Agricultural Engine & Boiler on wheels.
1 8 h.p. Agricultural Engine & Boiler on wheels.
1 40 & 50 h.p. Hor. High Speed "Southwark" Aut. Cut-off Engines. 1 Helve Hammer.
1 Upright Tub. Steel Boilers, 4 to 40 h.p. Cheap.
1 50 h.p. R. T. Boiler, 48 in. x 16 ft., 90 lbs. press. 1 25 h.p. R. T. Boilers, 42 in. x 10 ft. (38) 3 in. tubes.
1 Planer 36x35 in. x 10 ft. Bement. 1 Planer 33x33 in. x 9 ft. E. & C. Betts.
1 Planer 30x30 in. x 10 ft. Scott Bros.
1 Planer 24x24 in. x 4 ft. Scott Bros.

Second-Hand MACHINERY in Good Order

FOR SALE CHEAP.
Engines Lathes—62 in. x 17 ft.; 43 in. x 12 ft.; 32 in. x 12 ft.; 29 in. x 15 ft.; 24 in. x 10 ft.; 22 in. x 8, 10 and 12 ft.; 20 in. x 8 and 14 ft.; 15 in. x 6 and 8 ft.; 1 each 24 in. x 20 in. and 24 ft.; 24 in. x 12 ft.; 24 in. x 15 and 16 ft.; 18 in. x 10 ft.; 20 in. x 10 ft.; 20 in. x 12 ft.; 1 each 16 in. x 8, 10 and 12 ft.; 6 each 14 in. x 6 ft.; 1 12 in. x 5 ft.; 2 each 11 in. x 4 ft. and 5 ft.; 1 to 10 in. x 3/4 in. foot power.

1 each Planer, 24 in. x 24 in. and 8 ft. 1 each Planer, 30 in. x 30 in. x 8 ft.

1 Planer, 36 in. x 12 in. x 12 ft.; 50 in. x 30 in. x 17 ft.

1 Planer, 40 in. x 40 in. x 14 ft.

1 Planer, 42 in. x 42 in. x 10 and 12 ft.

1 Planer, 22 in. x 20 in. x 4 and 5 ft.

1 Planer, 16 in. x 16 in. x 3 ft.

1 Planer, 42 in. x 42 in. x 12 ft., with two heads.

1 Planer, 50 in. x 50 in. x 17 ft., with one head.

1 Planer, 100 in. x 100 in. x 18 ft., with two heads.

1 Engine Lathe, 22x22 ft., good order. Niles.

1 New Horizontal Boring Machine, with facing attachment, Newark Machine Tool Co., makers.

1 24x18x4-foot Planer. Ames.

1 Drop Head Drill.

1 Shaper each 6, 10, 12, 15, 20, 24 and 30-in. stroke.

1 Crank Planers. 6 Lincoln Pat. No. 2 Millers.

1 Universal Millier. Brown & Sharpe.

1 each 2, 3, 4 and 6 Spindle Gang Drill.

1 each Nos. 1, 3, 4 and 5 Screw Machines.

1 each 40 and 60 pound Vertical Hammers.

1 No. 53 Ferrucate Press. 1 Nut-facing Machine.

1 No. 24 Fowler Press.

10 Foot Presses, assorted. 8 Power Presses, ass'd.

12 Punching and Shearing Machines, assorted.

2 Return Tubular Boilers, 33 horse-power.

1 Bolt Cutter, each 4 in. to 1 in., and 3/4 in. to 2 in.

1 No. 1 Hand Millers. Pratt & Whitney.

1 Horizontal Engine each 25 and 40 horse-power.

1 Horizontal Boring Machine, 36in. x 6 ft.

2 each 8 and 13-inch Slotters. Correspondence solicited.

1 Power Mortising Machine. Also full line of New Machinery.

1 PRENTISS TOOL & SUPPLY CO.,
P.O. Box 202. 115 Liberty St., New York City.

1 24x18x4-foot Planer. Ames.

1 Drop Head Drill.

1 Shaper each 6, 10, 12, 15, 20, 24 and 30-in. stroke.

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1 Power Mortising Machine. Also full line of New Machinery.

TRADE NOTES.

The manufacturer of Morgan's heating boiler, the D. F. Morgan Boiler Co., Akron, Ohio, reports itself as being actively at work in its new quarters under more favorable conditions than possessed by the old plant, recently destroyed by fire.

The galvanized and stove-pipe iron made by the Cincinnati Corrugating Co. has met with a steadily-increasing sale ever since its introduction to the trade. They announced at the beginning that their motto was "Prompt shipments and every sheet guaranteed," and, notwithstanding a very heavy season's business, this motto has been kept constantly to the front. In addition to this branch of their business they are doing a larger business than ever before in their corrugated iron and steel roofing, siding, &c. When in need of anything of this kind our readers will do well to consult with them.

THE Ohio Pulley & Machine Co., of Warren, Ohio, is manufacturing a patent wood-rim, iron-arm and hub split pulley which is largely used by the machinery trade. A set screw passes through the iron hub, which overcomes the criticism that they will slip on the shaft. The company manufactures all sizes, from the smallest to the largest, the smallest split pulley being but six inches in diameter. Southern yellow poplar is the wood used, which is put together with glue and dowels. The Elliott Machine Co., 313 315 Smith's Wharf, Baltimore, Md., are sole agents for this and surrounding States.

RAYMOND BROS., 303 to 311 Canal street, manufacture an improved complete pulverizing plant with new and valuable features that will make it indispensable to phosphate and paint-mill owners. All silica and other hard foreign substances are removed automatically and discharged into a dust-room without the use of bolting cloth. The Impact pulverizers above referred to are attracting widespread attention in all parts of the country for their great saving in first cost, wear and tear, economy and their greater capacity. A fully illustrated descriptive circular will be mailed upon application.

BLAKESLEE MANUFACTURING CO., Du Quoin, Ill., note the following among recent shipments: Jet pumps to Jackson, Tenn., Little Rock, Ark., Decatur, Ill., Cincinnati, O., Chicago, Ill., Waverly, Ill., Evansville, Ind., Monroe, La., Cairo, Ill., St. Louis, Mo., Toledo, O., Washington, Ind., Parkersburg, W. Va., Des Moines, Ia., Wheeling, W. Va., Philadelphia, Pa., Mt. Vernon, O., Milwaukee, Wis., Mansfield, O., Richmond, Va., Kansas City, Mo.; steam pumps to Richmond, Va., Johnson City, Tenn., Nashville, Tenn., Omaha, Neb., Parkersburg, W. Va., Bunker Hill, Ill., Denver, Col., Louisville, Ky., Princeton, Ind., Harrisburg, Pa., Pittsburgh, Pa., Monroe, La., Memphis, Tenn., St. Louis, Mo., Paducah, Ky., Peru, Ill., Harriman, Tenn., Knoxville, Tenn.

THE Dixon Crucible Co., writing to the MANUFACTURERS' RECORD, states that "the year 1890, as you predicted twelve months ago, has brought a greater volume of business than for any previous year. While sales have increased, prices have also declined, which means, proportionately, a greater quantity of goods. Our output has taxed all the facilities we have, and in 1891 we must tear down and build greater. Competition has never been so active. Some of it before was never so foolish. Cut prices, when they approach and go below cost, means lack of business brains. In such competitions cut prices are the weak resources of the incompetent. The outlook for 1891 we think is good, except

as it may be qualified by timidity born of the present financial troubles. Successful business every year ceases more and more to be a walk-over, and the Darwinian law, the 'survival of the fittest,' is to be the law of the future in business as well as in nature."

INTRODUCTORY to a handsome catalogue of the National Electric Manufacturing Co. is the following statement which the many flattering testimonials received by that company gives ample foundation for: "The marked success which has attended the installation of our electric plants has gained for the National Transformer system an enviable reputation. Painstaking electrical engineering, punctilious attention to all details of mechanical construction, the use of the finest grades of all metals and materials entering into the construction of our electrical apparatus and the employment of a liberal factor of safety in rating capacity, have placed the National Transformer system in the front rank of modern electrical machinery." The catalogue is, as expected, replete with valuable electrical details, and a chapter is devoted to practical hints to persons installing and maintaining electric-light systems. Another pamphlet treating of the "National Direct Current Incandescent System" is also issued by the National Electric Manufacturing Co. The company is located at Eau Claire, Wis. L. N. Cox, 16 Fifth street S. E., Washington, D. C., is the company's Southern representative.

AMONG recent letters received by the Victor Manufacturing Co. of Buffalo, N. Y., is the following:

BUFFALO, N. Y., Aug. 27, 1889.
THE VICTOR MANUFACTURING CO.:

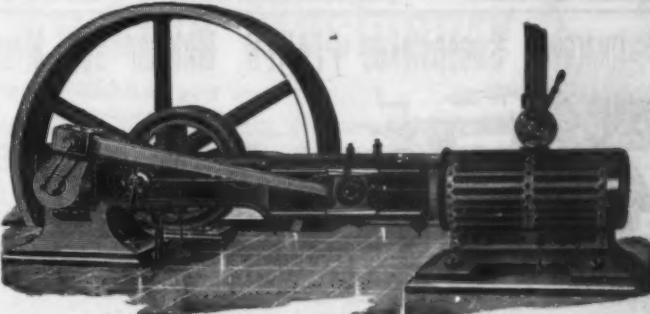
Gentlemen—It is now three months since we put in your Branton patent variety wood-worker. It has been in constant use on the same floor as our cabinet-makers, and as we do all kinds of fine woodwork, from the finest piece of furniture to the interior of the mansion, and all hardwoods, native and imported, we think your machine has had a good test, and have shown it to several woodworkers and some pattern-makers. They pronounce it a wonder. We could not get along without it in our special work. We do variety moulding, bevel sawing, grooving, dadoing, moulding, panel raising, boring and routing, and it does it better than any other machine we have ever seen. We run an Egan universal woodworker, but since your machine has been set up the Egan has run as a jointer only. We can do twice the amount of work on your machine; it is so easy to set up. We fully appreciate the merit of your machine, which for wide range of work, rapid changes and ease of adjustment is unequalled. In fact, we unhesitatingly pronounce it to be the best and most complete variety woodworker of which we have any knowledge, and do cheerfully and voluntarily commend it to the notice of cabinet-makers, pattern shops and all others whose business involves a large variety of work. We shall be pleased to show the machine to any one you may refer to us. Hoping your machine will meet with the success which it deserves, we are yours truly,

CUTTING & DELANEY, 198 Washington St.

E. J. WOOD, ARCHITECT, Consulting Engineer & Contractor,

243 BROADWAY, NEW YORK.

Superintendent of the Construction and Erection of Factories, Steam Plants and all kinds of Machinery. Engines Indicated, Valves Adjusted and Power Measured.



COMPLETE STEAM PLANTS. BOILERS, ENGINES, Every Description.
SHAFTING, PULLEYS, HANGERS.
DRAWINGS AND SUPERINTENDENCE. ECONOMY GUARANTEED.
CORRESPONDENCE SOLICITED.

I also make a Specialty of Taking Down, Removing and Reerecting Steam Plants and Machinery of every description. Send for Catalogue F.

HARRISON SAFETY BOILERS.

Merits Proven by Over Twenty Years' Practical Work.

Combine Maximum Safety.
Economy of Fuel, Durability.
All sizes from 4 H. P. to 340 H. P.

Base of Transportation, Erection and Repair.
Full Particulars, Drawings and Estimates mailed upon application.

HARRISON SAFETY BOILER WORKS, Germantown Junction, Philadelphia, Pa.
Southern Office, 8 to 18 N. Pryor street, Atlanta, Ga.

SEND FOR ILLUSTRATED CATALOGUE
OF THE

NEW PULSOMETER

STEAM PUMP.

Economical. Simple. Durable. Compact. Efficient.
PULSOMETER STEAM PUMP CO., New York.

SEYMOUR'S SHEARS AND SCISSORS

Finest in Finish and Quality.

Price-Lists on Application.

275 Kinds & Sizes



"I have handled your shears very successfully for the past twenty-four years."—JOHN MAYOR, Macon, Ga.

CARLIN & FULTON, Baltimore, Md., carry a full line of Seymour's Shears in stock.

HENRY SEYMOUR CUTLERY CO., 84 & 86 Chambers St., N. Y. City.

STEVENS' PATENT SPRING SCREW THREAD CALIPERS

Ideal, No. 64.

Price, by mail, postpaid.

3 inch.....\$1.00

5 ".....1.25

Ideal and Leader Spring Dividers and Calipers. Ideal Surface Gauges, Depth Gauges, and Fine Machinist's Tools. Illustrated Catalogue free to all.

J. STEVENS ARMS & TOOL CO., P. O. Box 215, Chicopee Falls, Mass.

STEVENS' PATENT SPRING KEY HOLE CALIPERS.

Leader, No. 73.

Price, by mail, postpaid.

3 inch.....\$0.70 1/4 inch.....\$0.35

Each tool will open as wide as its legs are long. So a 2 1/4 in. opens 2 1/4 inches, 3 1/2, 4 1/2, 5 1/2, 6 1/2.

TOOLS.

SIMPKIN & HILLYER, ENGINEERS & CONTRACTORS RICHMOND, VA.

Manufacturers of and Agents for Steam Engines, Boilers, Pumps and Heavy Machinery. Economical Steam Plants, Rope and Belt Driving. Special Machinery for Chemical and Fertilizing Works, Gas, Water and Creosote Works. A specialty of the "Warwick" Pole Road Locomotive, "Warwick" Tram Road Locomotive, and the "Warwick" Silent Steam Street Motor. Castings furnished. Repair work solicited. Consultations, Arbitrations and Valuations. Engines indicated. Plans, Specifications and Estimates prepared. Correspondence invited.

WORKS—Newport News, Va.

GENERAL OFFICE—1105 Main St., Richmond, Va.

SEND ALL REPAIRS TO OUR WORKS.

CORDES MAN, MEYER & CO.

171 & 173 W. SECOND STREET, CINCINNATI, OHIO.

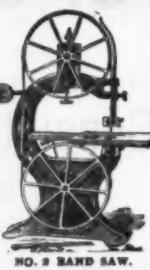
PINE GRADE OF LATEST

Wood-Working Machinery

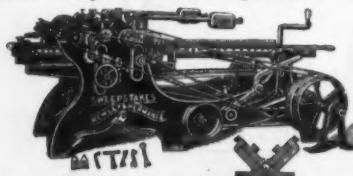
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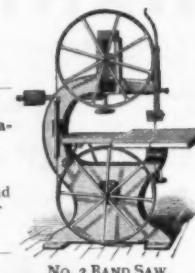
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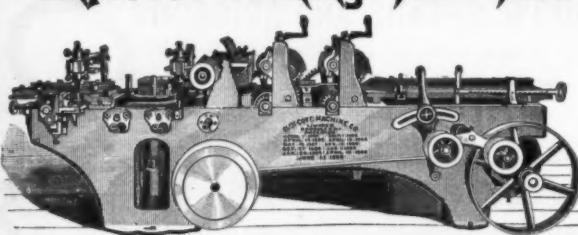
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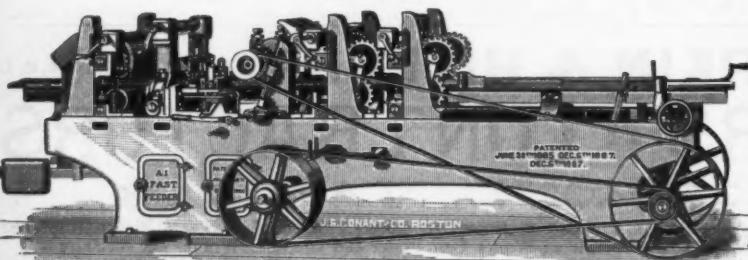
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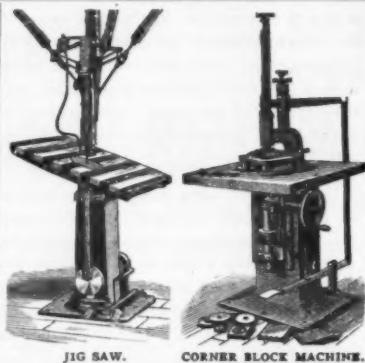
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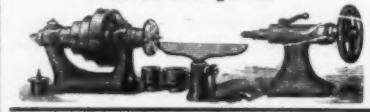
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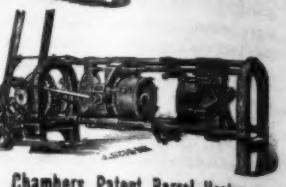
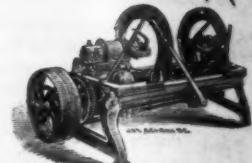
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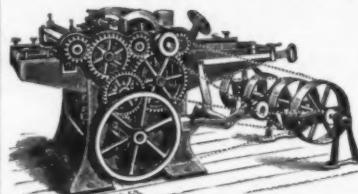
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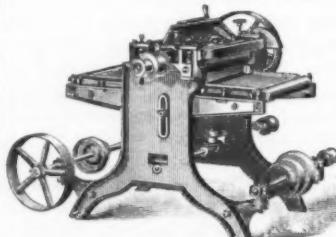
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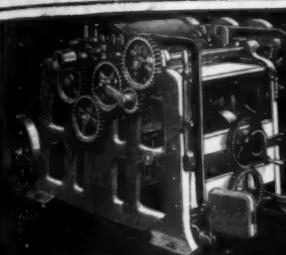
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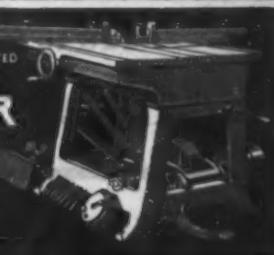
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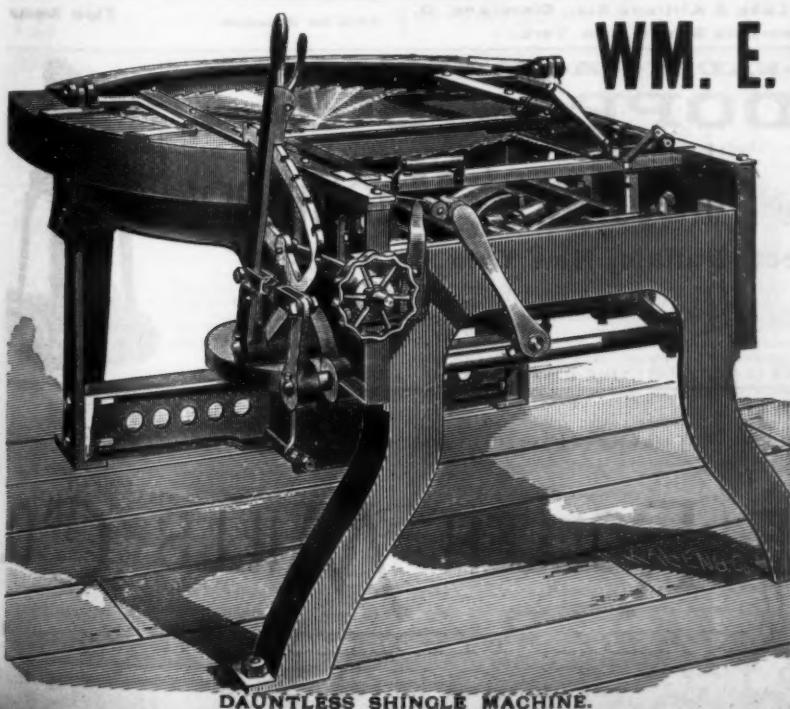
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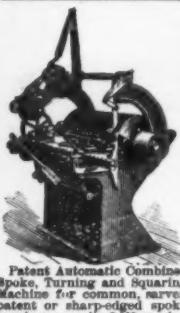
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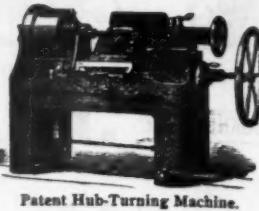
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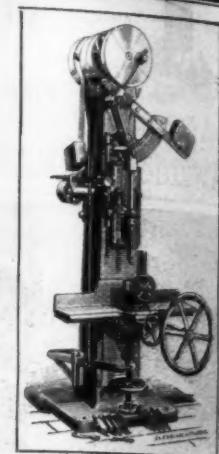
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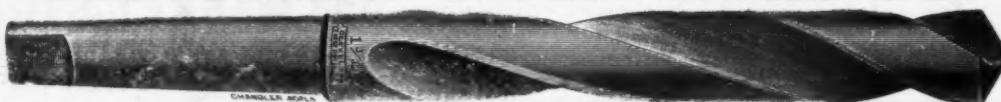
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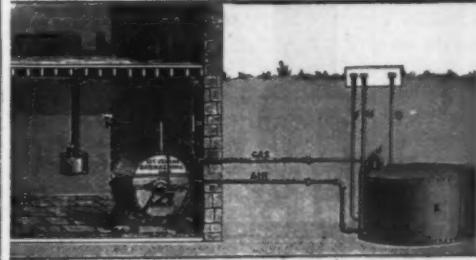
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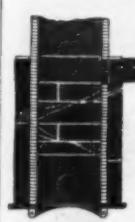
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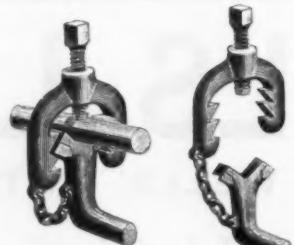
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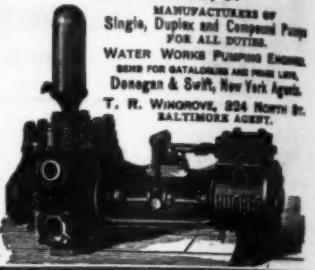


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Until you have seen our circulars. Engines ranging from 6 to 110 horse power, both Vertical and Horizontal, at prices below those of other reliable makers. 1000 in use. Boilers of every size. Automatic Engines for Electric Lights. Centrifugal Pumping Machinery for Draining or Irrigation. Established 18 years. Perfect satisfaction guaranteed. Ask for Circular M and address

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BALDWINVILLE, N. Y.

**THE SIMMERLY
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This is a revolving Derrick which makes a perfect circuit from either right or left. It can be worked from a lighter or Steamer when on solid ground. It is adapted for the hoisting of stone, iron ore, coal or any material, and can be used with or without the bucket. Capacity is one lift ranges from one to five tons. Further particulars on application to

The Simmerly Derrick Co.
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Southern Investments

Timber Lands bought and sold on commission. I make a specialty of large tracts. Capital invested safely. Timber estimated and valued. W. H. HOWCOTT, 100 Common Street, New Orleans, La.

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Has a population of between 1,300 and 1,500, constantly increasing; one of the healthiest and most beautiful towns in the State; on the great Pee Dee; excellent water power all around it; fine schools; churches of every denomination; literary lyceum and library; eligible town lots; fine timber lands near it; railroads from commercial centers; a delightful place to live. For particulars, address the Intendant.

ASHLAND, KY.

Offers manufacturers superior advantages. Situated in the famous Hanging Rock Iron Region, at the confluence of the Ohio and Big Sandy Rivers, at the head of low water navigation on the Ohio.

IRON, CLAYS AND TIMBER as cheap as at any point in the Union. Steam coal one to three cents per bushel. Besides the rivers, it now has

5 RAILROADS IN OPERATION.

and three more under contract, one approaching completion. Unexcelled advantages in cheapness and accessibility of raw material and transportation facilities.

In successful operation: Three Iron Furnaces; one Steel Nail Works, with Rolling Mill, largest in the West; Locomotive and Car Works; Dimension Furniture Factory; two Fire and three Red Brick Works and many others.

Large Steel Plant—400 tons daily capacity—constructed by Kelly, Bellefont & Norton Nail Works; Superior Water Works, Street Cars, Electric Lights, and ample Church and School Facilities. Town lots and acreage property on the market at very low rates. Liberal inducements offered meritorious concerns.

ASHLAND IMPROVEMENT CO.**F. H. DAVIS & CO.**

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GRAHAM, Tazewell Co., VA.

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Graham Land & Improvement Co. and Niagara Fire Insurance Co. of N. Y.

THE CLIFTON FORGE COMPANY,

CLIFTON FORGE, VA., situate in the center of the RICHEST COAL AND IRON DISTRICT IN THE SOUTH. A Railroad and Manufacturing Centre, with a present population of thirty-five hundred and rapidly increasing in numbers. Over sixty buildings are under contract, including two fine hotels, two bank buildings, Odd Fellows Hall, Protestant and Catholic Churches, a large Female Academy, and in addition, three large Planing Mills and a Woolen Factory are nearing completion and will go into operation at once. The Chesapeake & Ohio Railroad are building their immense Locomotive and Car Shops at this point, which will give employment to about two thousand skilled mechanics in their operation. A Steam Street Railroad is being constructed on the Company's lands.

LIBERAL INDUCEMENTS TO MANUFACTURERS to locate their plants at this point. Free Sites and Liberal Subscription to Stock will be assured to good industries. As a manufacturing point Clifton forge is unsurpassed, being the junction of the Eastern, Western & James River Divisions of the great C. & O. R. R. System, and with the close proximity of the rich coal, iron and lumber regions, it makes a substantial claim to cheap fuel, cheap raw material and cheap and reliable transportation, the three necessities to profitable manufacturing.

W. G. McCORMICK, President.
LEWIS HARMAN,
Secty. & General Manager.

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Six Trunk Line Railroads at**BESSEMER**

In the heart of Mineral Alabama, encircled with hills of Coal, Iron and Limestone Rock.

"The South is the coming El Dorado of American adventure. May the Almighty speed and guide her onward progress!" So wrote the Hon. W. D. Kelley, M. C., of Pennsylvania, a few months ago, and every day brings forth new evidence to prove the correctness of his prediction and to show that without a doubt the South is to be the richest country upon the globe. Its climate, soil, mineral and timber wealth, in rivers large and small, in a long seacoast, in abundant rainfall, in healthfulness and in every other advantage that could be asked nature seems to have done her best for this favored land. The wealth in iron and coal is beyond estimate. Of timber there is an unlimited supply, including nearly every variety of hardwoods for woodworking purposes.

Seven Furnaces, output 1890, 250,000 tons; Rolling Mill, 100 tons daily; Fire Brick Works, 25,000 daily; Many Lesser Industries

Offers Thirty Varieties of Hardwoods for Woodworking Industries.

11,000 City Lots For Sale.**The Bessemer Land & Improvement Co.**

this new year, are prepared to deal liberally for the founding of Iron and Woodworking industries in this growing Mining and Manufacturing Center.

H. F. DeBARDELEBEN, Pres.

H. M. McNUTT, Secretary.

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MONEY
WILL
GROW!

**"IMPROVEMENT THE ORDER OF THE AGE"**

For 15 years all users of typewriters have felt the necessity of improvement. You will find in the SMITH PREMIER TYPEWRITER the latest. All the essential features greatly perfected and important improvements. The best inventive talent and mechanical skill have been employed to produce a machine of Greater Durability, Excellence of Design and Special Features. We claim the invention as our own. It is Most Durable in Alignment, Easiest Running and Most Silent. All type cleaned in 10 seconds without soldering bands. Send for catalogue. THE SMITH PREMIER TYPEWRITER CO., Syracuse, N. Y., U. S. A.

**"GO SOUTH,
* Young Man."**

THE HONORABLE CHAUNCEY M. DEPEW, IN AN ADDRESS TO THE ALUMNI ASSOCIATION OF YALE UNIVERSITY, SAID, OF HIS RECENT TOUR THROUGH THE SOUTHERN STATES:

"The net results of this visit to the South, to my mind, is just this—that the SOUTH IS THE BONANZA OF THE FUTURE. We have developed all the great and sudden opportunities for wealth—or most of them—in the Northwestern States and on the Pacific Slope, but here is a vast country WITH THE BEST CLIMATE IN THE WORLD, with conditions of health which are absolutely unparalleled—with vast forests untouched, with enormous veins of coal and iron which yet have not known anything beyond their original conditions, with soil that, under proper cultivation, for little capital can support a tremendous population; with conditions in the atmosphere for comfortable living winter and summer which exist nowhere else in the country; and that is to be the attraction for the young men who go out from the farms to seek settlement and not by immigration from abroad, for I do not think they will go that way, but by the internal immigration from our own country it is to become in time as prosperous as any other section of the country and as PROSPEROUS BY A PURELY AMERICAN DEVELOPMENT."

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Where the Development is the Widest!
Where the Opportunities are the Greatest!
Where All are Welcome!

From Boston and New England Go via Merchants' and Miners' Steamship Line, via Norfolk; Pennsylvania R. R. via Norfolk, or Washington, or Harrisburg; Baltimore & Ohio R. R. via Shenandoah Junction.

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For all information, Reference Books, Mineral Maps, etc., apply at Agencies Norfolk & Western Railroad, 200 Washington Street, Boston. 303 Broadway, New York. 1433 Penna. Avenue, Washington. 67 East State Street, Columbus, O. Or General Offices, Roanoke, Va.

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PATENT LEVER FLUE CLEANER

is the best in the market. Why? Because the ends are protected from breakage by the buttons; the native flexibility entirely supercedes the old springs; the only cleaner with a follower to remove the refuse. Quicker and more easily adjusted than any other; better made; does better work; lasts longer.

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"VACUUM" EXHAUST STEAM ECONOMIZER**

Is a Feed Water Heater and Purifier.

And is the most perfect device known for heating and purifying feed water for steam boilers, preventing soot, and for heating buildings of any description, without back pressure, on engines, returning condensate, etc., etc. The one apparatus. Readily cleaned without stopping machinery. All parts accessible.

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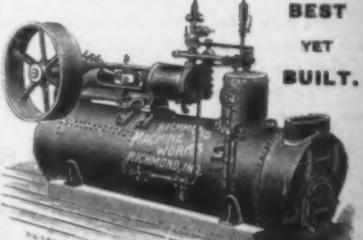
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Boilers, Stacks, Tanks and Sheet Iron Works. Steam Fittings of all Kinds.

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Send for circular.

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BRYANT IMPROVED AUTOMATIC

High-Speed Safety Engine.

Manufactured by

BRYANT SAFETY

ENGINE WORKS,

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Automatic governor non-explosive boiler, no extra insurance, no engine, no sparks, ashes or smoke. Specially designed for those wanting power from 2 to 5 h.p. This is the safest, cheapest, and most reliable

power known. Fuel—kerosene oil or natural gas.



The Shenandoah Land & Improvement Co.

RESPECTFULLY

— Calls the Attention of Manufacturers and Investors —

To the SUPERIOR LOCATION and FACILITIES

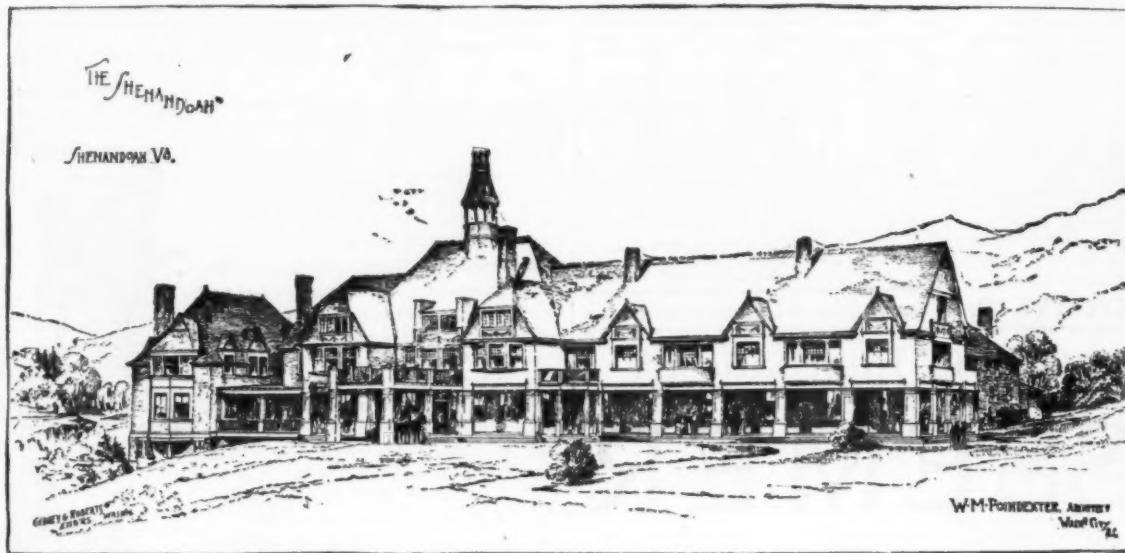
FOR MANUFACTURING PURPOSES, HOMES AND INVESTMENTS GENERALLY

NOW OFFERED AT

— SHENANDOAH, —

PAGE COUNTY,

VIRGINIA.



SHENANDOAH'S NEW HOTEL.

LOCATION.

The town is situated on the east bank of the Shenandoah river, in the world renowned Shenandoah valley, the climate and scenery being unexcelled in the most favored sections of the United States. 1,100 feet above sea level: malaria unknown, atmosphere clear and bracing.

MINERALS AND TIMBER.

On both sides of the Shenandoah river, and immediately adjacent to Shenandoah, are immense tracts of land rich in iron, manganese, copper, lead, asbestos, slates, ochres, fire-clay, etc., of fine quality.

Vast bodies of timber lands, furnishing in endless quantity the finest oak, hickory, ash, maple, walnut, chestnut, elm and pine for manufacturing and decorative purposes.

RAILROADS.

The Shenandoah Valley Railroad runs directly through Shenandoah, which will be the terminus of the Washington extension. The West Virginia Central Railroad, as projected, will pass through Shenandoah, opening up the immense mineral deposits of the Massanutten Mountains.

PRESENT INDUSTRIES IN OPERATION.

There is a Furnace Company, producing 30,000 tons of foundry and mill iron annually. They also operate a foundry. The Shenandoah Valley Railroad have here their principal machine shops, car shops, blacksmith and boiler shops. There is a brick works and two planing mills.

Improvements Decided Upon and Under Construction.

The Land and Improvement Company are building a large and commodious hotel, also a handsome office building. Plans are fully decided upon and work will soon begin on a water works, electric-light plant, water-power facilities, about one hundred dwellings, besides grading streets and laying sidewalks.

The Furnace Company have completed plans and will at once erect another furnace and a rolling mill.

The Railroad Company will erect a handsome rough stone passenger station, a large freight house, new shops and a round house—doubling present capacity.

Many individuals are building residences and stores.

INDUCEMENTS TO MANUFACTURERS.

The Shenandoah Land & Improvement Company are prepared to offer inducements to manufacturers to locate here, and will treat most liberally with any such who desire to establish industrial plants.

By special permission in the charter of Shenandoah, all manufacturers who may establish works here are exempted from corporation taxes for five years.

Possessing so many advantages of such varied character, together with the many improvements now fully decided to be established here, there is every reason to believe that, based on a conservative estimate, Shenandoah will have at least 10,000 inhabitants within the next three years.

FOR COPIES OF PROSPECTUS OR FURTHER INFORMATION, ADDRESS

J. F. WHEELWRIGHT, Secretary.

C. POWELL NOLAND, President.

PRINCIPAL OFFICE, SHENANDOAH, PAGE COUNTY, VIRGINIA.

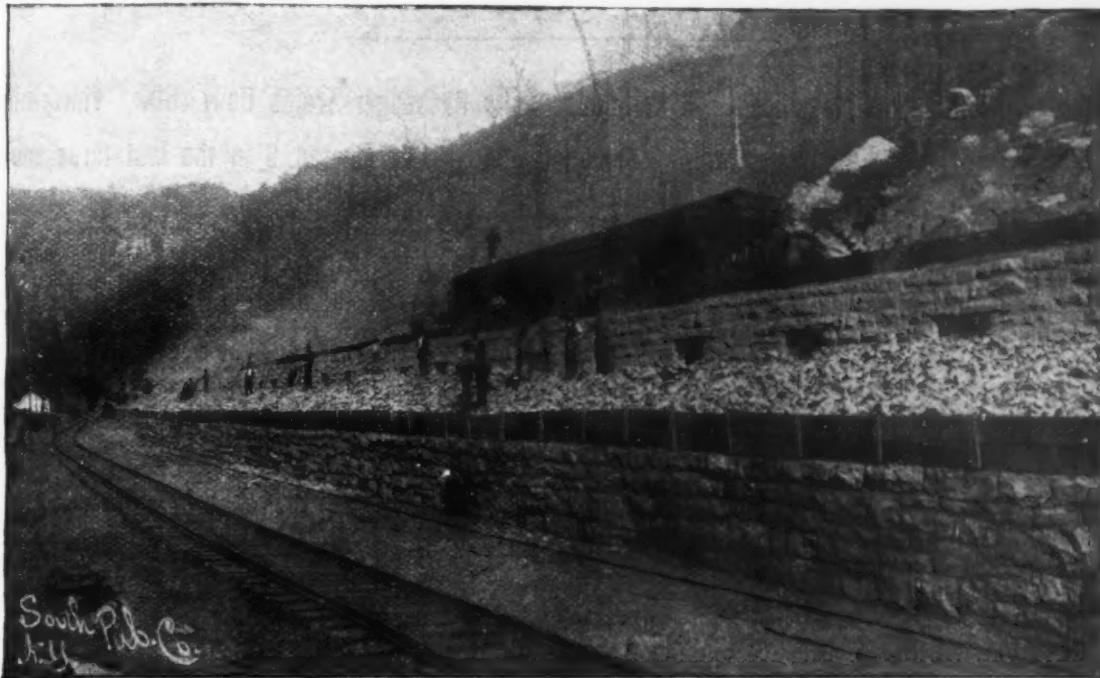
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Are the Shares in the STAUNTON DEVELOPMENT COMPANY, which was organized

NOT TO BOOM, BUT TO UPBUILD.

“The Empress of the Valley.”

Enthroned Amid a Score of New Industrial Towns, all of which Must Contribute to Her Prosperity.



Staunton is the established metropolis of the richest area between the Potomac River and the Gulf of Mexico.

Staunton is at the actual center of Virginia's richest ore fields.

Staunton has more paying industries already in operation than any town in the Shenandoah Valley.

Staunton has more money in her banks than any town in the South of equal population.

Staunton has more industries recently secured than any town in Virginia.

Staunton is the healthiest and most delightful place of residence in the United States.

At Staunton, malaria, that curse of so many towns, is entirely unknown.

Staunton is the most famous educational center in the South.

Staunton has more and finer churches than any city of its size on the continent.

Staunton offers cheaper raw material to manufacturers than any town in the South.

Staunton's transportation facilities are unsurpassed.

Staunton will soon have the finest new Hotel in the State, and

the Development Company is managed on strictly business principles.

This Company owns 2,200 acres of land in and adjoining Staunton.

A good building lot goes free with every two shares of stock of the Staunton Development Company.

The books of this Company will close on the 20th December, 1890.

Address M. ERSKINE MILLER, President,

STAUNTON, VIRGINIA.

HAGERSTOWN, MD.

At the Mouth of the Shenandoah Valley.

THE MAGIC CITY OF MARYLAND.

POPULATION IN 1884, 5,000; IN 1890, 12,000. WILL BE IN 1895 25,000.

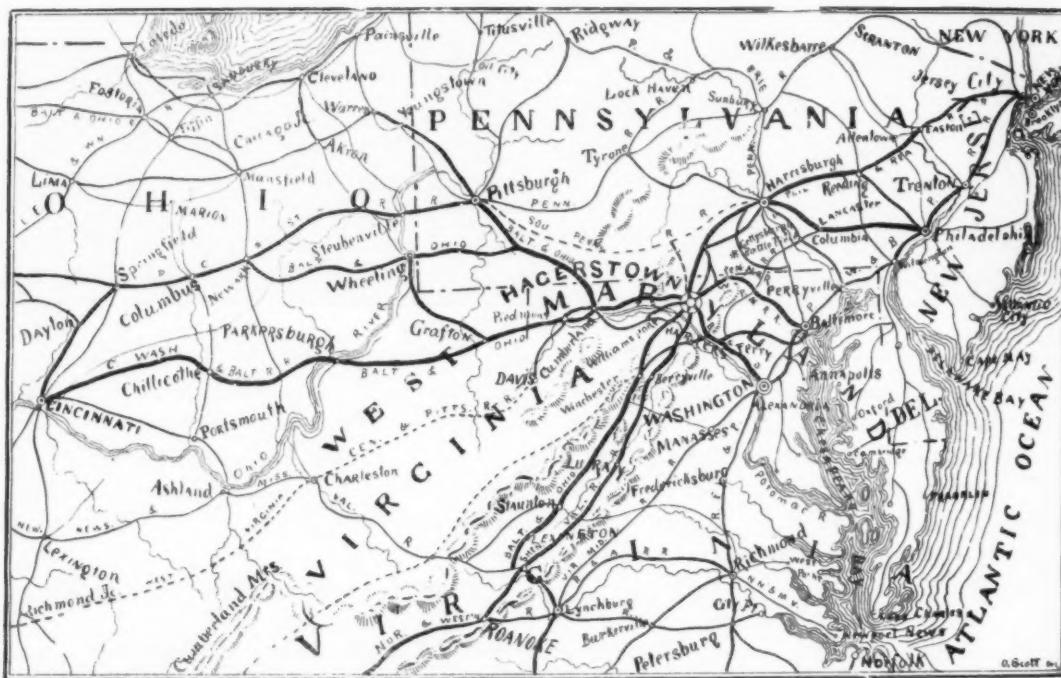
Her Growth Marvelous. Her Future Magnificent. 6 Railroads. Fifty Passenger Trains Daily (50.) Thirty-nine Mail Trains Daily (39). Unsurpassed for Manufacturing Facilities—95 already located, 6 in the last three months.

Its location commands the trade of Maryland, Virginia, West Virginia and Southern Pennsylvania. Substantial assistance given to manufacturers to locate here. Has magnificent Hotels, firm and well-graded Streets, Electric Lights, Pure Mountain Water, Free Postal Delivery and Electric Railway about to be built.

Ores, Timber and Agricultural Products

Cheap and in the Greatest

Abundance.



This map shows the location and railroad facilities of Hagerstown, in the "Garden Spot" of the Cumberland Valley.

Hagerstown Manf'g., Mining & Land Improvement Co.

WASHINGTON COUNTY, MD., REAL ESTATE DEALERS,

Own and Control about 1,000 Acres of Land adjoining the City Limits.

Capital Stock,	- - - - -	\$1,000,000
Remaining in Treasury,	- - - - -	575,000

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J. D. MAIN, Treasurer.	H. H. STRAUB, Acting Sec'y.

DIRECTORS.

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 PHARES M. MISHLER, President and Manager Inter-State Fencing Co.
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 REUBEN M. KEEDY, formerly in the Wholesale Notion Business.
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 ALEX. R. HAGNER, Counsellor-at-Law and Attorney for Second National Bank.

You Cannot Make a Better Present to Your Wife or Children than by giving them some Shares in a 20 per cent. Paying Stock.

BEST PAYING INVESTMENT ON EARTH. FLORIDA HAVANA TOBACCO GROWING

THE

C. S. Philips Patent Process Tobacco Growing & Curing Co.

Incorporated Under the Laws of New York. Twenty (20) Patents.

PLANTATIONS, 14,000 ACRES, FITZHUGH, POLK COUNTY, FLORIDA.

CAPITAL STOCK, \$1,500,000.

Divided into 150,000 Shares of \$10 each, full paid and unassessable.

CHAS. S. PHILIPS, President.

HARRY R. MILLER, Treasurer.

WM. H. CUTLER, Vice-President, Garfield Building, Brooklyn, N. Y.

10,000 Shares of Twenty (20) Per Cent. Preferred Stock of \$10 Each, of which there are 25,000 Shares yet for sale, and growing less every day; 80,000 Shares of Common Stock of \$10 Each, which are all taken by parties in the tobacco trade.

GREAT LAND PURCHASE.

TO WHOM IT MAY CONCERN.
This is to certify that the C. S. Philips Patent Process Tobacco Growing & Curing Company, of New York City, of which Mr. Charles S. Philips is president, has purchased from the South Florida Railroad Co., and the Plant Investment Co., through me and my office as Eastern Agent for the said companies, 13,558.71 acres of land, which is located in Polk County, Fla., being near Fitzhugh and Lake Hancock, and are the lands on which the said company is now planting tobacco.

Respectfully, J. D. HASHAGAN, Eastern Agent,
November 27, 1899. 361 Broadway, New York, N. Y.

To show our good faith and confidence in the large profits this Florida Havana Tobacco Growing & Curing Company expects to pay its stockholders the 80,000 shares used for the purchase of the Lands and Patents shall receive no dividends until twenty (20) per cent. per annum has been paid to the purchasers and holders of the 70,000 shares of the Working Capital Stock, the only stock that is for sale. This company is in full working order on the plantation putting in a crop which will be harvested this spring, and every dollar realized from the sale of the stock will be used only for the purpose of extending the acreage of the crop, and the profits the first year will not be less than twenty (20) per cent. or two dollars (\$2) per share each of ten dollars (\$10). The McKinley Bill puts two dollars (\$2) per pound duty on imported leaf, such as we produce in Florida, which enables us to sell our tobacco in the American market at much higher prices than the Cuban planter gets, and greater profit. Our Patent Curing Process saves three (3) years time in the curing of tobacco, and the process is a perfect and continuous one from the day it is harvested from the field. We shall run the profits to more than one hundred (100) per cent. in the course of two (2) or three (3) years. Fill out the application for shares for as many as you want or can pay for on the installment plan and mail it with amount of first instalment to our office.

The following certificate from the expert patent attorneys proves our claim to a right to the entire curing business under our patents, as we have no competitor in the Patent Office nor in the world, a very unique and enviable position for us and our stockholders.

HUBERT A. BANNING.

LAW OFFICES OF BANNING & MONROE
Patents, Incorporations, Trade Marks and Copyrights, Morse Building, 140 Nassau St.
NEW YORK, JANUARY 9, 1890.

CHARLES S. PHILIPS, ESQ., New York City.

DEAR SIR—After a thorough consideration of the state of the art, with which we have become familiar by long study and professional services in connection with the patents relating to the treatment, etc., of tobacco, and in view of the fact that the United States Patent Offices have given no reference anticipating your discovery as to the proper relations which should exist between the degrees of the heat and percentages of moisture, we do not believe that anyone ever preceded you in making the discovery. We are confirmed in this view by the absence of any theory or discussion of the process as described by you, either in any printed publications or patents or technical works pertaining to the treatment of tobacco. We know of no one who can possibly be your competitor in this matter, and have every confidence in your process, both as to its novelty and utility, and your right to the exclusive use of it.

Yours respectfully,

BANNING & MONROE.

To place a valuation of two million dollars on the patents would not be out of the way, as they are beyond the experimental stage and are earning about thirty thousand dollars per year, and it is expected that within the next three to five years the net income from the patents alone will amount to at least five hundred thousand dollars (\$500,000) per year, and ought to go to more than a million dollars (\$1,000,000), as this patent curing process saves three to four years' time and interest on the money on the cost of the crop for that length of time in the curing of "Fillers" (which is about one-half of the crop) and one to two years' time in the curing of the "Wrappers," which is the other half of the crop.

MR. C. S. PHILIPS, 188 Pearl St., New York.
DEAR SIR—We have used your process in the curing of a package of the 1889 crop of tobacco. The tobacco was put into the sweating room March 25. It was kept in the process until May 22, making fifty-nine days. It was stripped and sampled June 4. We are well pleased with the result. The curing is the most perfect of any lot we ever sampled, the tobacco being more uniform in its curing and color, and the outside as well cured as in the middle. From the tip of the leaf back to the band the color was even, showing none of the green spots we see in so much of our sweet tobacco. We are so well pleased with the result we should never wait for a packing to cure by summer heat, etc.

PUTNEY, WINDHAM CO., VT., JUNE 10, 1890.

Respectfully yours,
E. O. & H. D. GASSETT.

ENORMOUS DIVIDENDS paid to the stockholders by the Dutch companies. Do not say we cannot do even better.

From the reports of the four largest Dutch or Sumatra tobacco growing companies we take the following figures as to the dividends which they declared. Nearly all of the fine wrapper leaf grown by these companies was consumed in this country.

DIVIDENDS PAID—PER CENT.

NAME OF COMPANY.	1885.	1886.	1887.	1888.	1889.
Dell Mattschappij	101	77	107	108	109
Arendsburg Miatschappij	50	60	100	100	152
Amsterdam	30	30	70	30	80
Batavia	45	26	34	35	135

*Besides about \$250,000 written off for purchase on new estate.

The above figures are cold facts for investors to well consider before they decide not to improve this golden opportunity to invest in this American company.

CUT THIS OUT.

FORM OF APPLICATION FOR SHARES.

MR. CHAS. S. PHILIPS, President, 188 Pearl St., New York.

I HEREBY SUBSCRIBE TO Shares of the

C. S. PHILIPS PATENT PROCESS TOBACCO GROWING & CURING CO.; at \$10 per Share, non-assessable, and agree to pay 20 per cent. on subscribing [\$2 per Share] and 20 per cent. per month until all Installments are paid.

Enclosed find First Installment of \$ Dollars.

Date,

Name,

Postoffice Address in full,

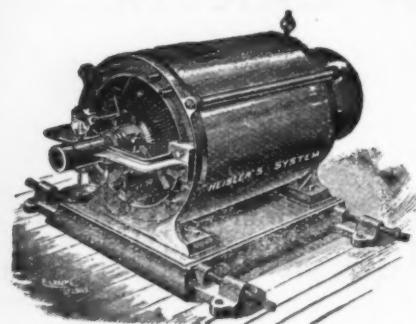
Please date and fill out this blank for the number of shares you wish to subscribe for. Sign your name and address on the blank lines under the date and enclose Check or Draft for one-fifth of the amount you subscribe for and mail the same to the above address, upon receipt of which you will receive a proper receipt, and a regular Engraved Certificate of Stock for the number of shares you subscribe for when the last installment is paid. Agents wanted. Write for particulars.

This Blank to be Filled Out, Signed and Sent to 188 Pearl Street.

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UNEQUALLED FOR DISTRIBUTION OVER WIDE AREAS.



SPECIALLY ADAPTED FOR
STREET, COMMERCIAL &
GENERAL ILLUMINATION
FROM CENTRAL STATIONS.

Plant may be located where power can be secured cheapest, even if miles distant from the lighting. Safety, Reliability, and Financial Success fully demonstrated. Plan of Wiring the Simplest, Cheapest and most Efficient. Strictly Series. Noted for the Brilliance and Beauty of the Light. Lamps, 10 to 100 Candle Power; Long Life without Blackening. Dynamo Self-contained and perfectly Automatic.

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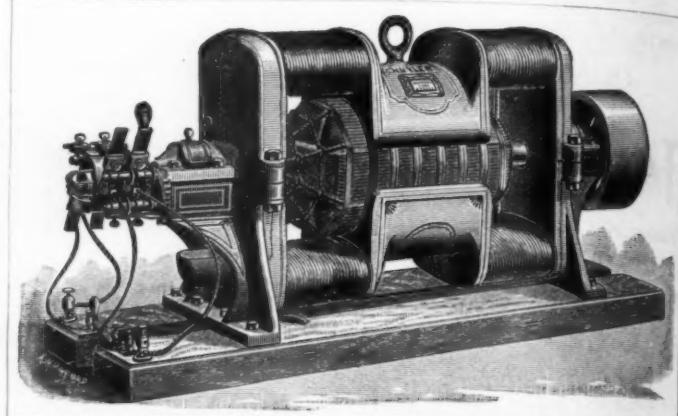
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TRANSFORMERS AND LAMPS
OF UNEQUALLED EFFICIENCY.

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OF THE HIGHEST ECONOMY AND DURABILITY.

Alternating Currents.

Minor Appliances of the Same Quality as the Larger Apparatus.

Intending Investors Should Investigate this System. A Slight EXAMINATION will SHOW that all CLAIMS can easily be SUBSTANTIATED.
Send for Illustrated Catalogue on the Alternating Current System.

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American Soc. Mech. Eng., General Manager.**THE RICHMOND ICE-MACHINE CO.**

MANUFACTURERS OF THE

**Most Improved Ice-Making
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ON THE COMPRESSION PLAN.****A WORD IN YOUR EAR.**—Our Machines are giving satisfaction and making the guaranteed amount of Pure, Solid, Transparent Ice.**WE HAVE UNDOUBTEDLY THE BEST AND SIMPLEST MACHINE ON THE MARKET.**

We guarantee the proper working of our machinery. All working parts built to gauge, so they can be readily duplicated, and nothing but the very best material used. Specifications and estimates furnished. Correspondence solicited.

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Send for our Pamphlet "How to Make an ICE FACTORY PAY."

L. H. BICE, President.

JNO. CAREY, Secy. & Treas.

W. COOK, Superintendent.

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The Cook Improved Absorption Ice Machine

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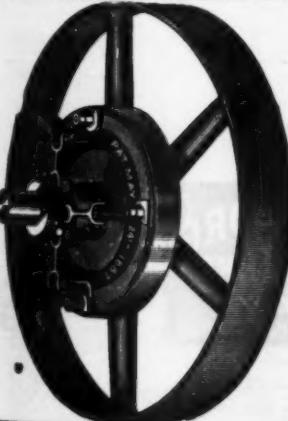
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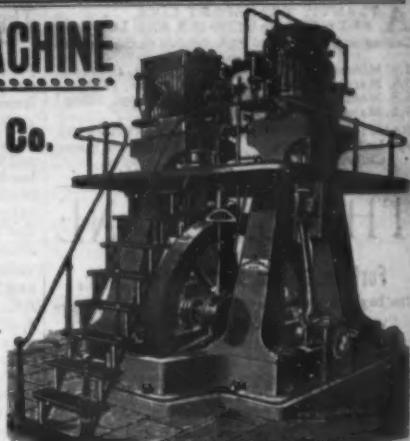
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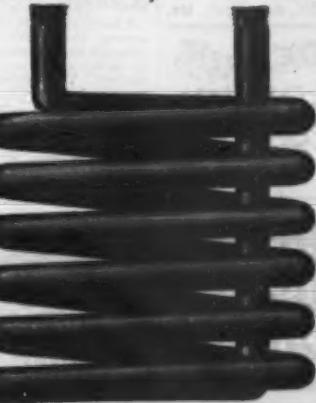
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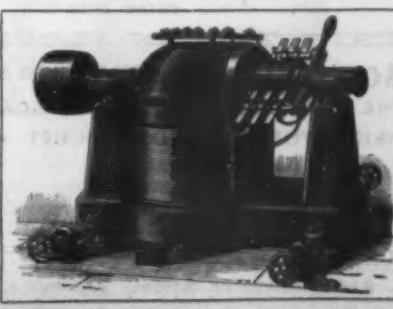
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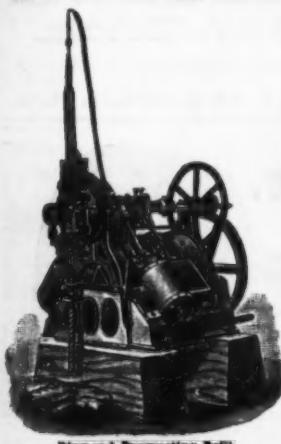
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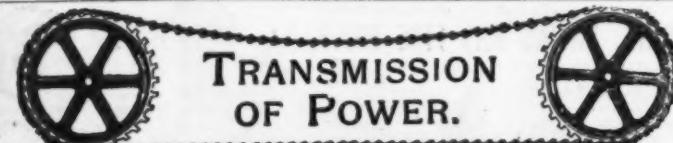
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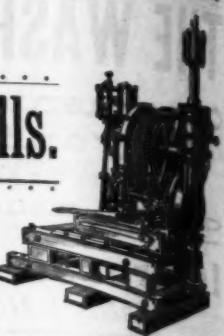
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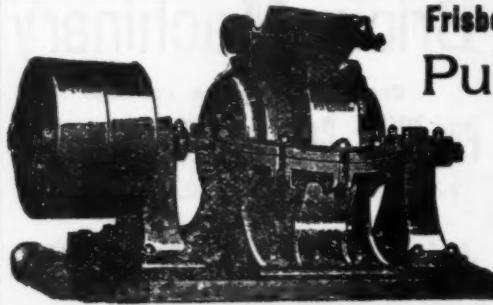
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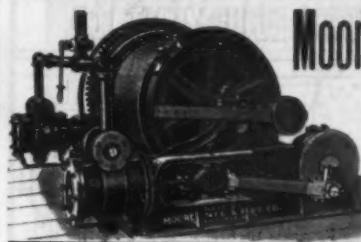
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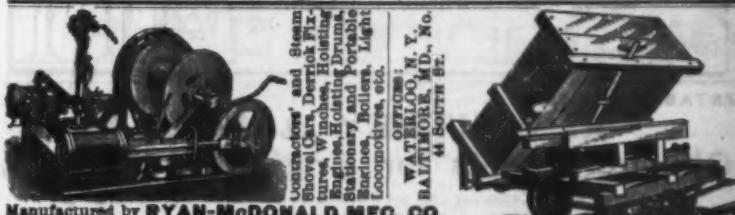
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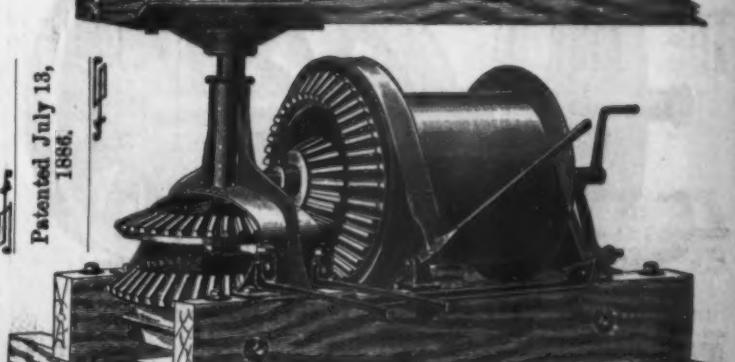
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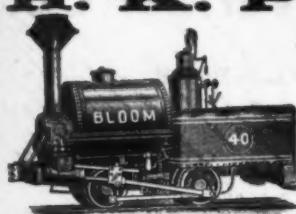
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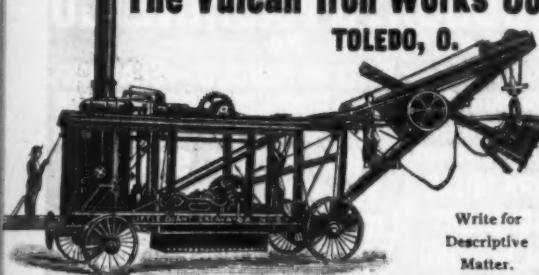
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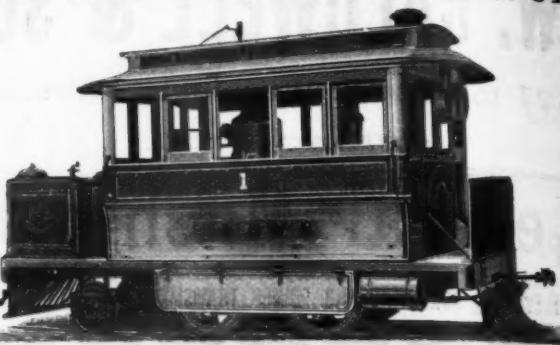
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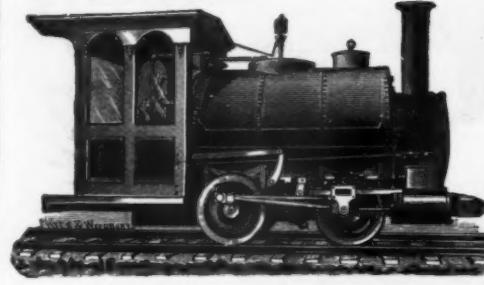
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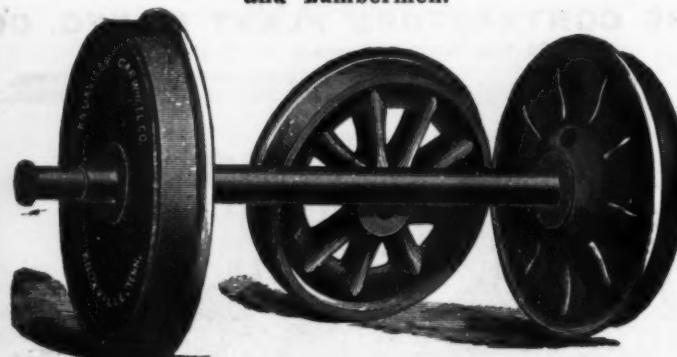
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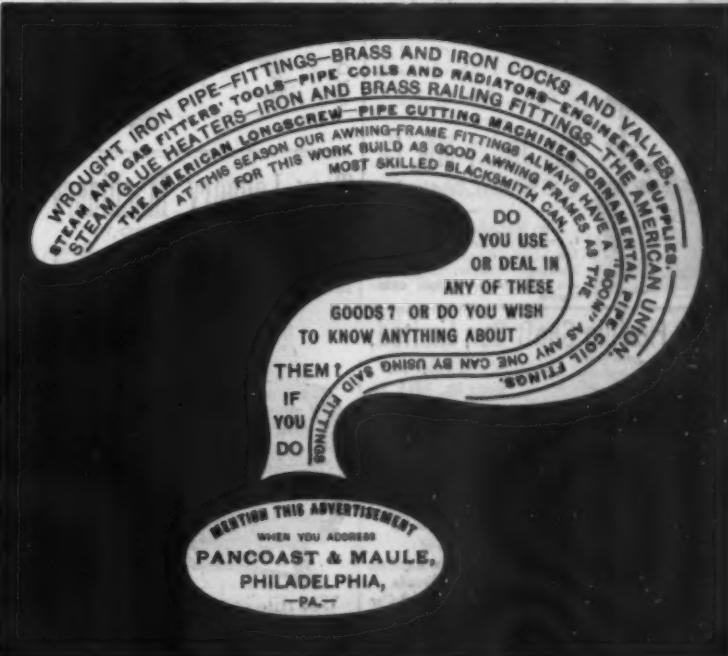
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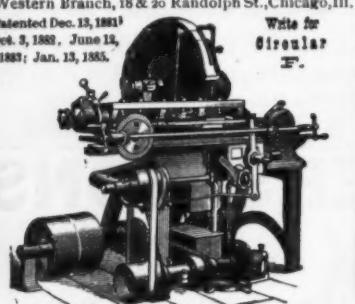
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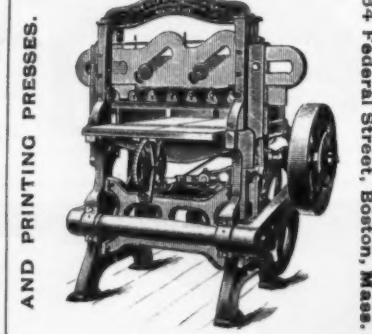
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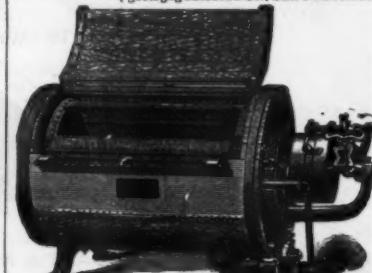
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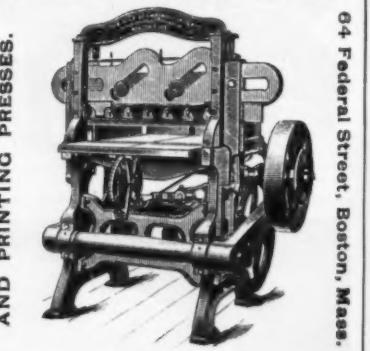
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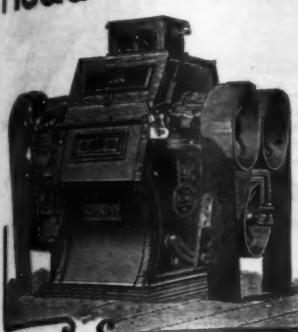
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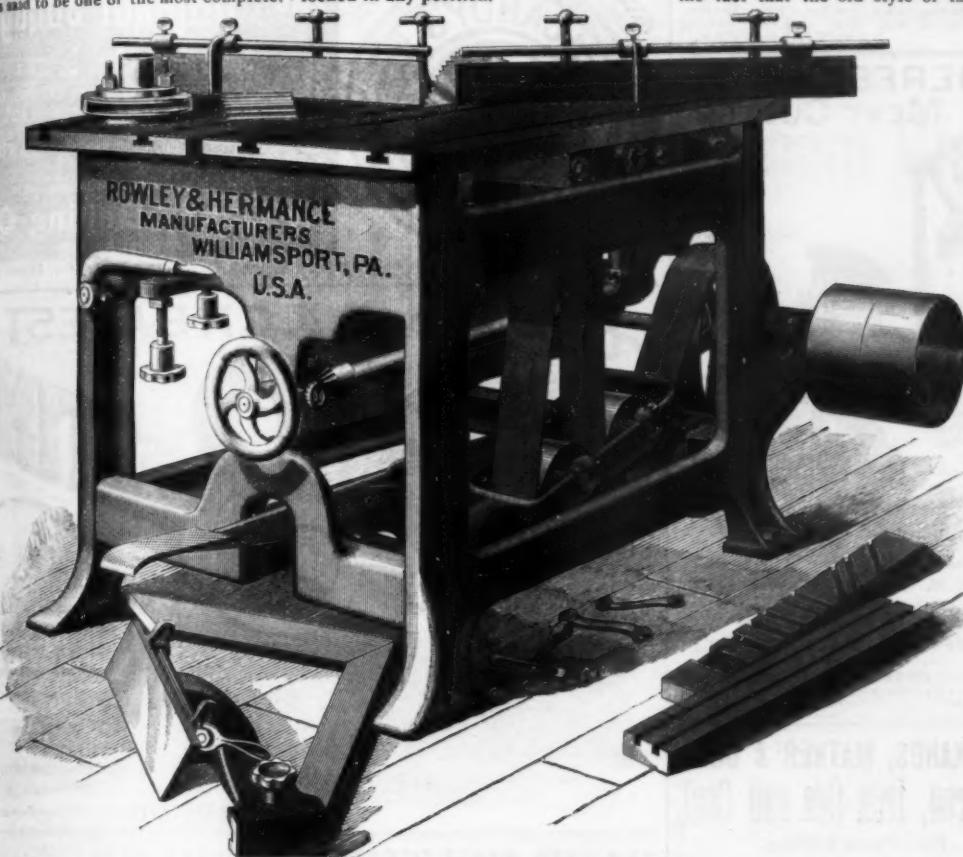


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New Pattern Improved Combination Saw Bench.

The machine represented by the accompanying cut is of an entirely new design, and is said to be one of the most complete.

enables the operator not only to adjust the stop accurately, but to maintain the adjustment in case it is necessary to remove the saw or head during the execution of a certain job. The table may also be securely locked in any position.



NEW PATTERN IMPROVED COMBINATION SAW BENCH.

thoroughly constructed and easily managed combination saw and dado machine on the market for cutting-off, ripping, mitre and bevel sawing, dadoing, etc., doing the work of several machines and occupying the space of but one.

The counterhaft is placed in such a position that the machine may be belted from above. The travel of the saw produces only a very slight movement of the tightener frame. The belt is very wide and the tightener pulleys unusually large, thereby producing a powerful machine and reducing the stress on the belt.

The saw may be brought forward a distance of 23 inches by means of a foot trundle, which allows the operator the use of both hands to handle the board, by which arrangement he can accomplish more work than can be done without it.

The right-hand table is pivoted to the frame and may be swung upward, thus exposing the carriage and all the surrounding parts, while the left-hand table is arranged to slide outward by means of a handle, as shown in the cut, which is so constructed as to always keep the table parallel with the v., and is also fitted with a screw which

The machine is provided with a ripping gauge, which may be set at any angle. The cross-cut gauges are instantly clamped to the table, and are so arranged that by loosening two nuts with the stationary wrenches they are at once changed from stationary to sliding gauges, and may be set at any angle not exceeding 45 degrees. The gauges can be reversed so that the saw will force the board against the face of the gauge if desired. A sliding top is used to prevent the saw from going entirely back when it is desired to make short cuts.

The machine will cut four inches thick, and will cut through a 1-inch board 21 inches wide, and weighs 1,260 pounds. With each machine one 14-inch saw, one belt and the necessary wrenches are furnished. Those in want of machinery should write to Rowley & Hermane, Williamsport, Pa., U. S. A., who are the manufacturers, and further information can be had by sending for their 96-page catalogue.

HAVE you real estate notes, municipal or county bonds that you want to convert into cash? If it is a Southern note or bond you can advertise it free, four times, in the MANUFACTURERS' RECORD.

The Indispensable Lathe Dog.

It seems that there has always been more or less annoyance, inconvenience and loss of time in machine shops, from the fact that the old style of lathe dog

in the lathe, and can be used equally as well between collars as upon plain or straight work.

A large dog can be used on a light mandrel where the work is large in circumference. It can also be used for locking work on the mandrel in case of it slipping.

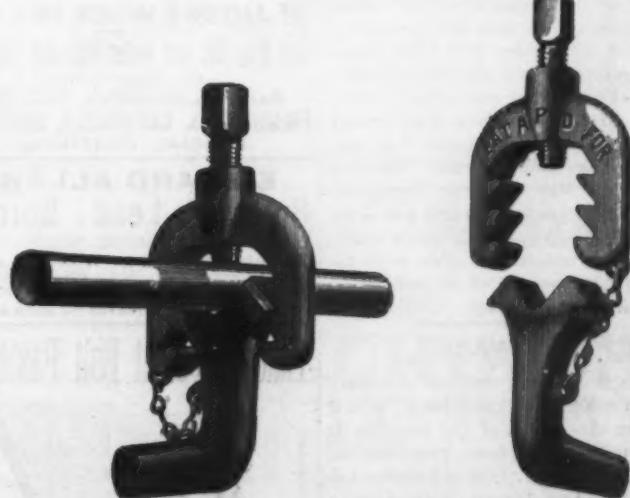
The great claim of the makers is that one set of three Indispensable dogs will do the work that usually requires from ten to twelve of the old style of dogs to do and at about one-half the cost. Admitting this statement, no well-regulated machine shop can afford to be without one or more sets of Indispensable lathe dogs, which will, it is said, be found after a trial, as their name indicates, "indispensable."

They are manufactured by the Indispensable Lathe Dog Co., of Philadelphia, and are being marketed and controlled by Palmer, Cunningham & Co., Limited. A large number of orders have been taken for them, which will be delivered about January 1st next. All who have seen them speak only in the very highest terms.

They are made of steel castings and fitted with steel set-screws, and if your tool supply dealer has not these in stock, send your order direct to the agents, Palmer, Cunningham & Co., 607 Market street, Philadelphia, Pa., and it will receive prompt attention.

The prices are as follows: For No. 1, taking from $\frac{1}{4}$ to $1\frac{1}{4}$ inches, price each, \$1.50; No. 2, taking from $\frac{1}{2}$ to $2\frac{1}{4}$ inches, price each, \$2.50; No. 3, taking from 1 to $3\frac{1}{4}$ inches, price each, \$3.50; price, per set of three, to take from $\frac{1}{4}$ to $3\frac{1}{4}$ inches, \$7.50.

THE attention of woodworking concerns, pattern-makers, furniture and variety woodworking manufacturers is directed to the advertisement of the Victor Manufacturing Co., No. 6 Ferry street, Buffalo, N. Y., who



THE INDISPENSABLE LATHE DOG.

must be adjusted to the work before centering it in the lathe.

The Indispensable lathe dog is intended to overcome these objections. It can be attached to work after the work is centered &

make one of the most ingenious and valuable machines introduced in years—a combination variety woodworker, which is in reality 8 most useful and splendidly working machines in one. Write for their illustrated circular and price-list.

The Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, December 24, 1890.

There is no important change to chronicle in any department of the iron trade. No weakness is apparent, and consumptive requirements, while heavy, as they have been for months past, are not being presented. This withholding is due simply to the fact that buyers desire to see the outcome of the financial settlements; all heavy buying will be postponed until then. If there should be any heavy failures, they will occur soon after the new year. Then there is an anxiety to see what Congress will do in the matter of financial legislation. Should prompt and earnest action be taken, confidence will be rapidly restored, and heavy buying will be entered upon to the advantage of prices generally. There is less to be said at this time, as manufacturers and business men generally are buying the least possible amount of material and goods. Production is not very much in excess of consumption, if any. Quite a number of furnaces have recently blown off for a short time; some few additional furnaces will blow in during January. It is expected there will be a moderate increase in output from February 1st to April, but it is believed there will be a corresponding demand, under which strong prices will prevail. These prognostications are based upon facts clearly in sight. There is no change in quotations since last week. Much more buying would no doubt be done but for the monetary stringency. There is a scarcity of cars at different points in the South. The consumptive demand is equal to present production. The ore shipments this season foot up nearly 8,000,000 tons. Bessemer is selling at \$16 at Ohio furnaces. Quite a number of Western furnace companies are refusing to enter into contracts at less than current rates. At New York active efforts were made a few days ago to unload large lots of inferior pig. In all Western markets a heavy demand for crude iron is likely to show itself in January. In foreign material nothing is being done anywhere. Efforts are being made by buyers of skelp iron to place large contracts at a drop of one-tenth below current rates. A good feeling exists among sheet-iron makers and manufacturers of barbed wire and nails. The entire iron market is in a good condition, considering the unfavorable influences that have unsettled values elsewhere. From present indications January will be an active month; a great deal of buying will be done for late winter delivery. The feeling exists in a good many quarters that prices of furnace and mill products may advance as much as 10 per cent., but comparatively few dealers are willing to act upon that possibility. The steel-rail makers have held several meetings with a view to put things in better shape, with reference especially to prices. Rumors are ripe of sales at exceptionally low prices, but it is not known that anything has been done under \$28. A meeting was held in New York last Thurs'ay at which action was taken which will likely bring all rail makers into a common understanding. Structural and plate mills are running full time, and on all small orders are securing full card rates.

HARDWARE.

Trade is exceeding dull and orders are few and small. This condition of trade is usual at this season of the year, but is more marked when lower prices are expected January 1. Prices remain unchanged, and as January is the favorite month in which changes in prices are made, there will be no decided change in prices before that time. The Southern trade is dull, owing to the very low price of cotton and the small shipments for consumption. Many of the largest consumers are buying

cotton only for immediate use, owing to the difficulty of collecting money. In many cases some of the large jobbers have tried to cancel unfilled orders, and are reducing their stocks, to be prepared to meet lower prices or a continued stringency in the money market. Some of the largest manufacturers have contracts on hand that will run them to March or April, but many of the smaller factories will soon be in the market for orders.

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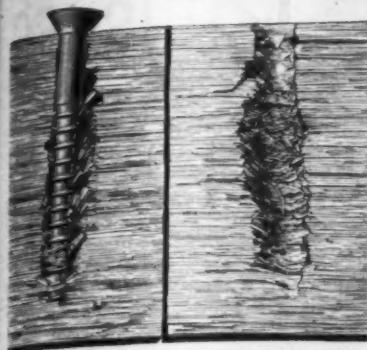
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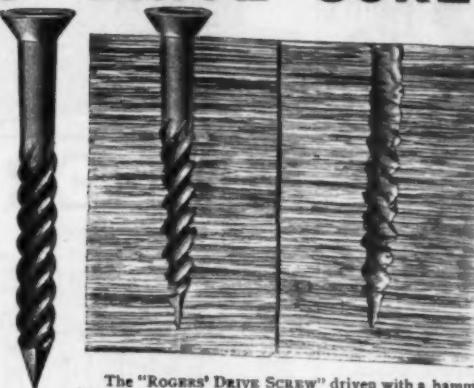
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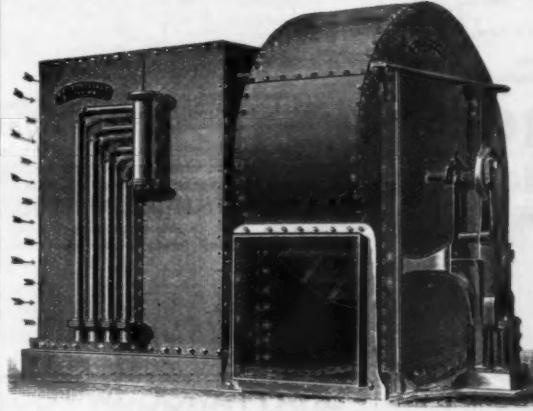
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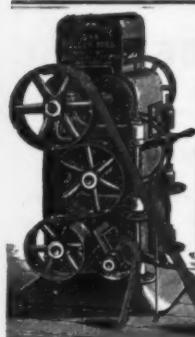
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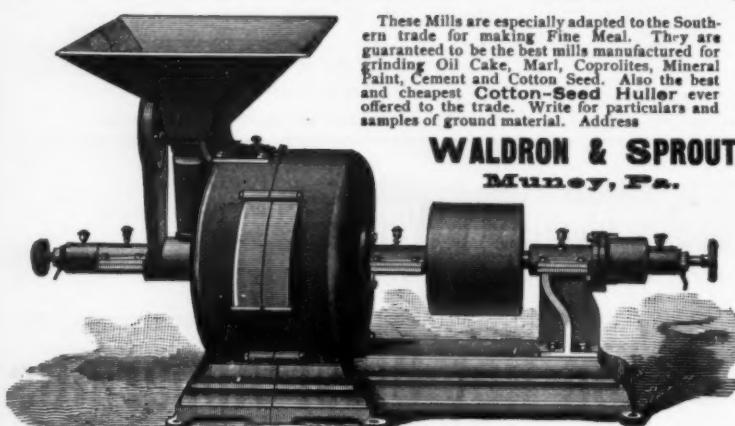
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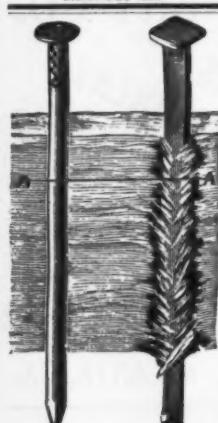
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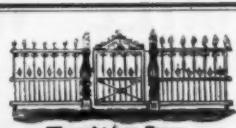
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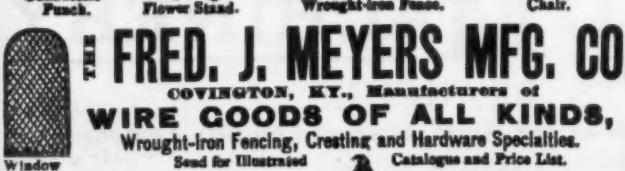
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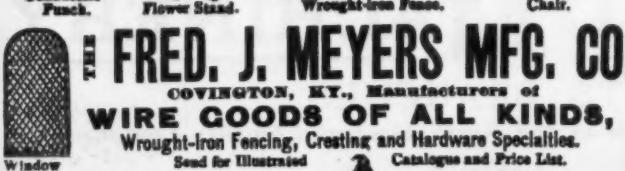
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Eastern Lumber Markets.

[Special Cor. MANUFACTURERS' RECORD.]

NEW YORK, December 23, 1890.

A good deal is being said in lumber trade circles concerning the prospective relations between supply and demand. A great deal, of course, depends upon the amount of logging that will be done this winter. So far as we have been able to learn, operations will be as extensive as ever. If there will be any decline in activity, it will be on account of money, and not through fear of any lack in demand. Nothing of interest has occurred in lumber trade circles this week. Demand is quieting down. Very little business has come up. Stocks are in good shape. There will be no anxiety to sell, although some concerns are a little pressed for money. Agents are making but little effort just at present, confining their efforts to strictly legitimate dealings—that is to say, to supplying a good actual demand. Arrivals are quite liberal from all points of the compass. Some dealers who are short of lumber are making very little stir about it. Wholesalers and agents have been endeavoring to induce them to stock up, but they have been accustomed to doing so only on very favorable terms, and, strange to say, the terms now being offered them are not favorable; in other words, wholesalers are standing out for good prices. With all of the weakness that is reported in the general markets, there has been as yet no sacrificing done in lumber. Wholesalers have reached the conclusion that their stock is worth so much money, and when buyers need it they will come and get it. There is a strong feeling in reference to all lumber from the South. Wholesalers are looking for a good winter distribution of yellow pine. A great many operations will be pushed as far as the weather will permit during the winter, and we are confident at least of running down stocks very low, so that even if we do not ship in much new stuff during the winter, everybody will be hungry for yellow pine by the opening of spring. Under this condition of things we expect good strong spring prices. If the rumors are correct concerning the better organization of the lumber manufacturers in Georgia and elsewhere in the South, we will have very little trouble in realizing fair margins on next year's business. Of course we do not know the probable volume of that business, but if it is as good as this year, which is probable, we will be content. For a few weeks past we have been doing very little in North Carolina pine, and there is less forward buying done in it than in farther south pine, because shipments can be more quickly made.

In regard to hardwoods the only statement that can be made is that stocks are of moderate extent, and that a good deal of lumber could be sold here if Southern manufacturers would take a little less. As long as prices are so strong in the South as they are and have been, there is no inducement to make heavy purchases, especially as we must run the risk of fluctuations.

In white pine prices are very well maintained, even though stocks are heavy. A fair business has been done in hemlock. Spruce is scarce and has sold at a little advance within a few days. Quartered oak is coming in on order to fill contracts, and of course is bringing good prices. Ash has been shipped in on consignment and has been going rather low. Our advices from various Western points are all to the right color. Michigan and Wisconsin lumbermen will push work in the woods very earnestly all winter. West of the Mississippi a good lumber demand has kept up until the close of the season. The fall trade has been unusually large everywhere. Throughout the West both white and yellow pine have been run down in stocks. There are signs of the growth of the spirit of organi-

zation. At various points in the country, especially in the South, cypress shingles are meeting with good sale. All building material will be in good demand during the winter. It is too soon to borrow trouble as to strikes in the building trades. Architects and builders are making preparations for another year in '91 like '90. Saw-mill building will, from present statements of machinery makers, be pushed with the same confidence as in the past. Large tracts of timber land have come into the possession of capitalists who will be anxious to turn their timber into lumber and cash.

TO SOUTHERN corporations, bankers and brokers: The MANUFACTURERS' RECORD will give investment offerings four insertions free, announcements not to exceed one inch in space.

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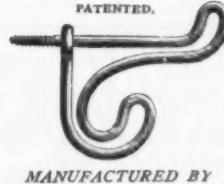
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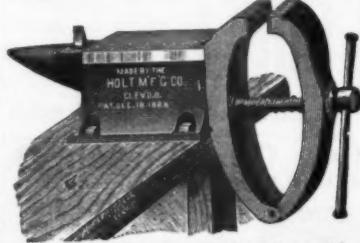
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Literary Notes.

Among the late publications of Charles H. Sergel & Co., 318 Dearborn street, Chicago, the drama of the "Dominion of Darkness," by Count Leo Tolstoi, is having a wide circulation. In this remarkable drama the author continues his work of trying to raise the moral tone of Russian peasantry. It is in five acts, and was first produced in St. Petersburg, but immediately suppressed, and the present version meets with the hearty approval of American readers. Another work, fresh from the same press, by Count Tolstoi, is "Work While Ye Have the Light," a tale of the early Christians, finely wrought in the author's remarkable style.

The Cosmopolitan, one of the youngest of successful American periodicals, is a remarkable illustration of what can be accomplished when ample financial resources are allied with energy, brains and enterprise. The January number of Cosmopolitan, in addition to its usual variety of attractions, will contain the first of a two-part novel by "Julien Gordon," the son d'œuvre of Mrs. Van Rensselaer Cruger. This lady's well-known stories, "Diplomat's Diary" and "A Successful Man" (the latter written for the Cosmopolitan), have interested thousands of readers at home and abroad. The aims of the publishers of this monthly have been to furnish a family magazine, first-class in all respects, at a price that would enable readers of limited purses to become subscribers, and at the same time to make it a medium through which unknown writers of real genius might bring their works before the public. Both purposes have been adhered to, and the public has shown its appreciation by taking 100,000 copies of the December issue.



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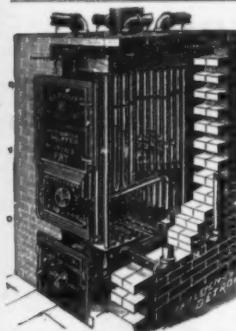
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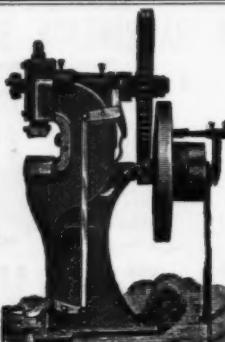
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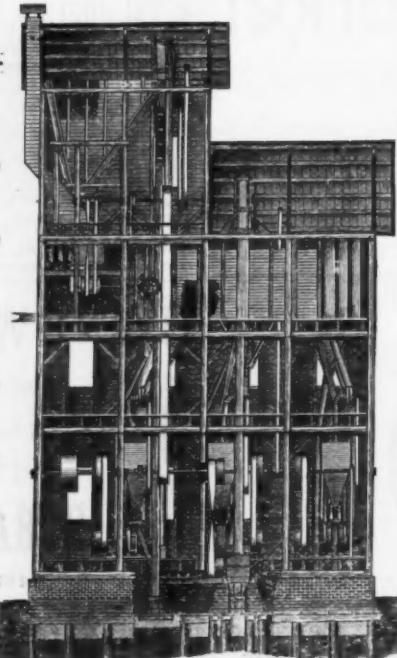
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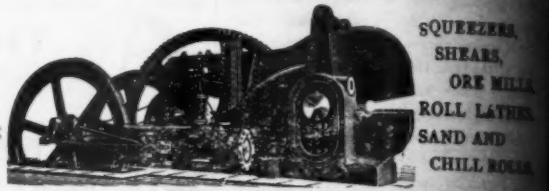
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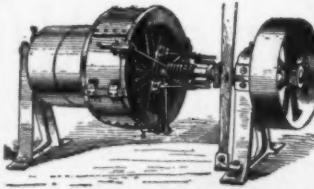
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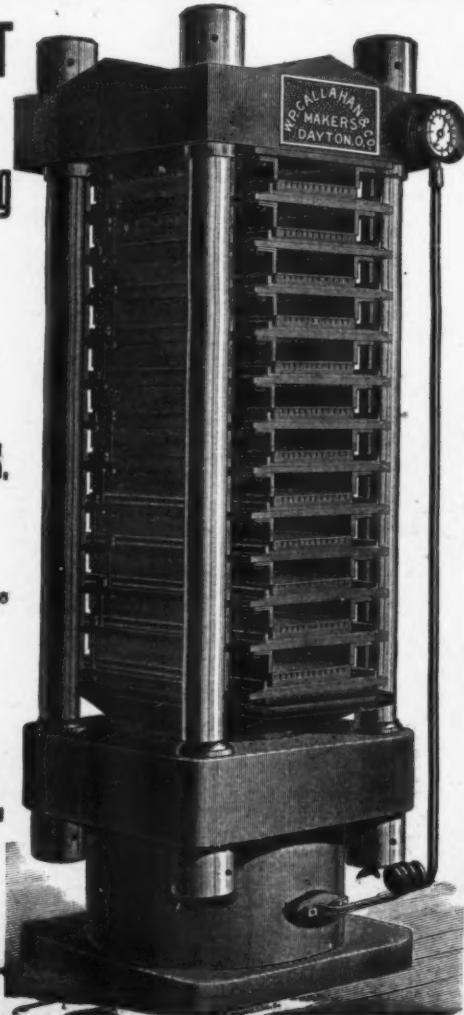
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